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U.S. Department  
of the Interior

Bureau of  
Land Management

Grand Junction  
District, Colorado

# FINAL WILDERNESS ENVIRONMENTAL IMPACT STATEMENT



## GLENWOOD SPRINGS RESOURCE AREA

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1987

per 1987





# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
COLORADO STATE OFFICE  
2850 YOUNGFIELD STREET  
LAKEWOOD, COLORADO 80215



IN REPLY REFER TO

SEP 28 1987

CO-931  
8500

Dear Reader:

This is the Final Environmental Impact Statement (FEIS) for the wilderness portion of the Glenwood Springs Resource Management Plan. The Draft Environmental Impact Statement (DEIS) on the Grand Junction Resource Management Plan served as the DEIS for this document and was distributed to the public on November 5, 1982.

This FEIS has been prepared by the Grand Junction District of the Bureau of Land Management (BLM) in accordance with the Federal Land Policy and Management Act of 1976. Specific guidance has been provided by BLM's Wilderness Study Policy, the National Environmental Policy Act (regulations in Federal Register, Vol. 43, No. 230, November 29, 1978), the Wilderness Act of 1964 and BLM Planning Regulations (Federal Register, Vol. 48, No. 88, May 5, 1983).

This FEIS analyzes four wilderness study areas (WSAs) in the Glenwood Springs Resource Area. The environmental, social and economic effects of designating or not designating each WSA as wilderness are analyzed and described. This FEIS includes representative comments received on the DEIS and the responses to these comments.

The Secretary will review this report and then submit his recommendations to the President by 1991. The President then has 2 years to submit his recommendations to Congress. Only Congress can decide which areas will be designated wilderness.

Thank you for your interest in this environmental statement.

Sincerely,

Associate  
Neil F. Morck  
State Director

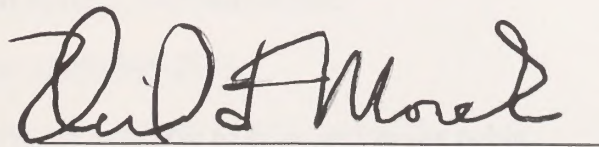
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**FINAL WILDERNESS**  
**ENVIRONMENTAL IMPACT STATEMENT**  
**FOR THE GLENWOOD SPRINGS RESOURCE AREA**  
**PREPARED BY**  
**U. S. DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**  
**COLORADO STATE OFFICE**  
**GRAND JUNCTION DISTRICT**



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**WILDERNESS**  
**ENVIRONMENTAL IMPACT STATEMENT**  
**FOR THE**  
**GLENWOOD SPRINGS RESOURCE AREA**  
**GLENWOOD SPRINGS, COLORADO**

Draft ( )      Final (X)

U. S. Department of the Interior, Bureau of Land Management

1. TYPE OF ACTION:    Administrative ( )    Legislative (X)
2. ABSTRACT:    This final environmental impact statement (FEIS) analyzes and describes the environmental, social, and economic effects of designating or not designating as wilderness, four wilderness study areas (WSAs) in the Glenwood Springs Resource Area. The study areas are Eagle Mountain (330 acres), Hack Lake (10 acres), Bull Gulch (15,000 acres), and Castle Peak (11,940 acres). The All Wilderness and No Wilderness Alternatives were considered for each WSA. In addition, a Partial Wilderness Alternative was considered for the Bull Gulch WSA. The Proposed Action, which was identified after the environmental analysis, recommends the entire Eagle Mountain and Hack Lake WSAs and 10,414 acres of the Bull Gulch WSA as preliminarily suitable for wilderness designation. The entire Castle Peak WSA and 4,586 acres of the Bull Gulch WSA are recommended unsuitable for wilderness designation.
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4. Date statement made available to EPA and to the public:  
  
Draft - November 5, 1982  
  
Final - November 20, 1987



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1891

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# TABLE OF CONTENTS

	Page
SUMMARY .....	S-I
CHAPTER 1, INTRODUCTION AND PLANNING PROCESS	
PURPOSE AND NEED FOR ACTION .....	I-1
LOCATION .....	1-1
WILDERNESS REVIEW PROCESS .....	I-4
Inventory .....	I-4
Study .....	1-4
Environmental Issue Identification/Scoping .....	1-6
Other Wilderness Study Considerations .....	1-12
Reporting .....	I-13
CHANGES FROM THE DRAFT ENVIRONMENTAL IMPACT STATEMENT .....	I-13
CHAPTER 2, DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION	
ALTERNATIVES CONSIDERED .....	2-1
ALTERNATIVES CONSIDERED BUT ELIMINATED FROM ANALYSIS .....	2-1
ALTERNATIVES CONSIDERED AND ANALYZED IN DETAIL .....	2-2
EAGLE MOUNTAIN WILDERNESS STUDY AREA .....	2-2
Proposed Action (All Wilderness Alternative) .....	2-2
No Wilderness/No Action Alternative .....	2-4
HACK LAKE WILDERNESS STUDY AREA .....	2-4
Proposed Action (All Wilderness Alternative) .....	2-4
No Wilderness/No Action Alternative .....	2-6
BULL GULCH WILDERNESS STUDY AREA .....	2-7
Proposed Action (Partial Wilderness Alternative) .....	2-7
All Wilderness Alternative .....	2-11
No Wilderness/No Action Alternative .....	2-12
CASTLE PEAK WILDERNESS STUDY AREA .....	2-13
Proposed Action (No Wilderness/No Action Alternative) .....	2-13
All Wilderness Alternative .....	2-20
CHAPTER 3, AFFECTED ENVIRONMENT	
EAGLE MOUNTAIN WILDERNESS STUDY AREA (CO-070-392)	
Setting .....	3-1
Energy and Mineral Resources .....	3-1
Wilderness Values .....	3-1
Mandatory Wilderness Characteristics .....	3-1
Special Features .....	3-2
HACK LAKE WILDERNESS STUDY AREA (CO-070-425)	
Setting .....	3-2
Energy and Mineral Resources .....	3-2
Wilderness Values .....	3-2
Mandatory Wilderness Characteristics .....	3-2
Special Features .....	3-2
BULL GULCH WILDERNESS STUDY AREA (CO-070-430)	
Setting .....	3-3
Soils .....	3-3



## TABLE OF CONTENTS

	Page
Energy and Mineral Resources .....	3-3
Terrestrial Wildlife - Big Game .....	3-4
Timber Resources .....	3-4
Recreation Opportunities and Use .....	3-4
Wilderness Values .....	3-7
Mandatory Wilderness Characteristics .....	3-7
Special Features .....	3-7
Land Tenure .....	3-8
<b>CASTLE PEAK WILDERNESS STUDY AREA (CO-070-433)</b>	
Setting .....	3-8
Soils .....	3-8
Energy and Mineral Resources .....	3-8
Aquatic Wildlife .....	3-8
Terrestrial Wildlife - Big Game .....	3-11
Timber Resources .....	3-11
Recreation Opportunities and Use .....	3-11
Wilderness Values .....	3-12
Mandatory Wilderness Characteristics .....	3-12
Special Features .....	3-12
<b>CHAPTER 4, ENVIRONMENTAL CONSEQUENCES</b>	
<b>ASSUMPTIONS AND GUIDELINES</b> .....	4-1
<b>MITIGATION MEASURES</b> .....	4-2
<b>EAGLE MOUNTAIN WILDERNESS STUDY AREA (CO-070-392)</b>	
Proposed Action (All Wilderness Alternative) .....	4-2
Energy and Mineral Development .....	4-2
Wilderness Values .....	4-2
No Wilderness/No Action Alternative .....	4-3
Energy and Mineral Development .....	4-3
Wilderness Values .....	4-3
<b>HACK LAKE WILDERNESS STUDY AREA (CO-070-425)</b>	
Proposed Action (All Wilderness Alternative) .....	4-3
Energy and Mineral Development .....	4-3
Wilderness Values .....	4-3
No Wilderness/No Action Alternative .....	4-4
Energy and Mineral Development .....	4-4
Wilderness Values .....	4-4
<b>BULL GULCH WILDERNESS STUDY AREA (CO-070-430)</b>	
Proposed Action (Partial Wilderness Alternative) .....	4-4
Erosion and Sedimentation .....	4-4
Energy and Mineral Development .....	4-6
Big Game Habitat and Populations .....	4-6
Timber Production .....	4-7
Recreation Opportunities and Use .....	4-7
Wilderness Values .....	4-7
All Wilderness Alternative .....	4-8
Erosion and Sedimentation .....	4-8
Energy and Mineral Development .....	4-8
Big Game Habitat and Populations .....	4-8
Timber Production .....	4-9
Recreation Opportunities and Use .....	4-9
Wilderness Values .....	4-9



## TABLE OF CONTENTS

	Page
No Wilderness/No Action Alternative .....	4-10
Erosion and Sedimentation .....	4-10
Energy and Mineral Development .....	4-10
Big Game Habitat and Populations .....	4-10
Timber Production .....	4-10
Recreation Opportunities and Use .....	4-10
Wilderness Values .....	4-10
CASTLE PEAK WILDERNESS STUDY AREA (CO-070-433)	
Proposed Action (No Wilderness Alternative) .....	4-11
Erosion and Sedimentation .....	4-11
Energy and Mineral Development .....	4-12
Aquatic Habitat and Populations .....	4-12
Big Game Habitat and Populations .....	4-13
Timber Production .....	4-13
Recreation Opportunities and Use .....	4-14
Wilderness Values .....	4-14
All Wilderness Alternative .....	4-14
Erosion and Sedimentation .....	4-14
Energy and Mineral Development .....	4-14
Aquatic Habitat and Populations .....	4-15
Big Game Habitat and Populations .....	4-15
Timber Production .....	4-15
Recreation Opportunities and Use .....	4-15
Wilderness Values .....	4-16
ADVERSE EFFECTS WHICH CANNOT BE AVOIDED .....	4-16
SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY .....	4-16
IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES .....	4-17
NET ENERGY ANALYSIS .....	4-17
CHAPTER 5, CONSULTATION, COORDINATION, AND PUBLIC COMMENTS	
DOCUMENT PREPARATION .....	5-1
CONSULTATION AND COORDINATION .....	5-1
In Preparation of the DEIS on the Glenwood Springs Resource Management Plan .....	5-1
In Preparation of the FEIS on the Glenwood Springs Resource Management Plan	
and this Wilderness FEIS .....	5-1
In Preparation of this Wilderness FEIS .....	5-4
RELATIONSHIP TO OTHER DOCUMENTS .....	5-4
PUBLIC COMMENTS .....	5-5
Analysis and Review Procedures .....	5-5
Comments and Responses .....	5-5
APPENDICES	
APPENDIX 1. REQUIRED MANAGEMENT STIPULATIONS .....	A1-1
APPENDIX 2. STANDARD STIPULATIONS FOR OIL AND GAS LEASING .....	A2-1
GLOSSARY .....	G-1
REFERENCES .....	R-1



## TABLE OF CONTENTS

Page

### TABLES

TABLE S-1.	SUITABLE AND UNSUITABLE RECOMMENDATIONS .....	S-1
TABLE 1-1.	WILDERNESS STUDY AREAS ANALYZED IN THIS FEIS .....	1-1
TABLE 1-2.	ORIGINAL ACREAGE CONSIDERED FOR WILDERNESS DESIGNATION IN THE GLENWOOD SPRINGS RESOURCE AREA .....	1-5
TABLE 1-3.	ISSUES ANALYZED FOR EACH WSA IN THIS FEIS .....	1-7
TABLE 1-4.	STANDARD METROPOLITAN STATISTICAL AREAS WITHIN 5 HOURS' DRIVE OF THE GLENWOOD SPRINGS RESOURCE AREA .....	1-13
TABLE 2-1.	EAGLE MOUNTAIN WSA—SUMMARY OF IMPACTS BY ALTERNATIVE .....	2-6
TABLE 2-2.	HACK LAKE WSA—SUMMARY OF IMPACTS BY ALTERNATIVE .....	2-7
TABLE 2-3.	BULL GULCH WSA—SUMMARY OF IMPACTS BY ALTERNATIVE .....	2-14
TABLE 2-4.	CASTLE PEAK WSA—SUMMARY OF IMPACTS BY ALTERNATIVE .....	2-21
TABLE 3-1.	SEDIMENT YIELD—CASTLE PEAK WSA .....	3-8
TABLE 3-2.	AQUATIC HABITAT—CASTLE PEAK WSA .....	3-11
TABLE 4-1.	EXPECTED EROSION AND SEDIMENTATION FROM VEGETATION MANIPULATION AND TIMBER HARVESTING—BULL GULCH WSA .....	4-5
TABLE 4-2.	EXPECTED EROSION AND SEDIMENTATION FROM TIMBER HARVESTING CASTLE PEAK WSA .....	4-11
TABLE 5-1.	FINAL ENVIRONMENTAL IMPACT STATEMENT TEAM .....	5-2
TABLE 5-2.	PRELIMINARY WILDERNESS SUITABILITY RECOMMENDATIONS IN DEIS ALTERNATIVES .....	5-5
TABLE 5-3.	LIST OF CONTRIBUTORS .....	5-7

### MAPS

MAP 1-1.	GLENWOOD SPRINGS RESOURCE AREA LOCATION MAP .....	1-2
MAP 1-2.	GLENWOOD SPRINGS RESOURCE AREA—LOCATION MAP OF WILDERNESS STUDY AREAS .....	1-3
MAP 2-1.	EAGLE MOUNTAIN WSA—PROPOSED ACTION .....	2-3
MAP 2-2.	HACK LAKE WSA—PROPOSED ACTION .....	2-5
MAP 2-3.	BULL GULCH WSA—PROPOSED ACTION .....	2-9
MAP 2-4.	CASTLE PEAK WSA—PROPOSED ACTION .....	2-17
MAP 3-1.	BULL GULCH WSA—ENERGY AND MINERAL RESOURCES .....	3-5
MAP 3-2.	BULL GULCH WSA—WILDLIFE, TIMBER, AND RECREATION RESOURCES .....	3-6
MAP 3-3.	CASTLE PEAK WSA—ENERGY AND MINERAL RESOURCES .....	3-9
MAP 3-4.	CASTLE PEAK WSA—WILDLIFE, TIMBER, AND RECREATION RESOURCES .....	3-10

## SUMMARY



The first part of the paper discusses the general theory of the subject, and the second part discusses the experimental results. The theory is based on the assumption that the system is in a steady state, and the results are in good agreement with the theory.

The experimental results are shown in Figure 1, and the theoretical results are shown in Figure 2. The agreement between the two is very good, and the results are in good agreement with the theory.

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## SUMMARY

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# SUMMARY

## PROPOSED ACTION

For the Glenwood Springs Resource Area in western Colorado, the Secretary of the Interior proposes to recommend 10,754 acres in three WSAs as preliminarily suitable for wilderness designation by Congress and 16,526 acres in two WSAs as nonsuitable for wilderness designation.

Table S-1 shows the suitability recommendation for each WSA.

Table S-1.

### Suitable and Nonsuitable Recommendations (in Acres)

Wilderness Study Areas	Non-Suitable Acres BLM	Preliminarily Suitable Acres BLM
Eagle Mountain <sup>1</sup> (CO-070-392)	0	330
Hack Lack <sup>2</sup> (CO-070-425)	0	10
Bull Gulch (CO-070-430)	4,586	10,414
Castle Peak (CO-070-433)	11,940	0
Total	16,526	10,754

<sup>1</sup> Contiguous to the Maroon Bells-Snowmass Wilderness, administered by the U. S. Forest Service

<sup>2</sup> Contiguous to the Flat Tops Wilderness, administered by the U. S. Forest Service

This environmental impact statement examines the environmental, social, and economic impacts that would result from the designation or nondesignation of each of the four WSAs. The purpose of this document is to assist the Secretary of the Interior in making a recommendation to the President and Congress on the suitability or nonsuitability of the WSAs for designation as wilderness.

## ALTERNATIVES ADDRESSED

Two alternatives are examined for all four WSAs: All Wilderness and No Wilderness (No Action). A third alternative, the Partial Wilderness Alternative, was only examined in detail for the Bull Gulch WSA. The All Wilderness Alternative examines the impacts of designating all four WSAs in their entirety as wilderness. The No Wilderness Alternative (No Action) analyzes the impacts of not designating any of the four WSAs as wilderness. Under the No Wilderness Alternative, management of the areas would be consistent with the existing Resource Management Plan (RMP) for the Glenwood Springs Resource Area. The Partial Wilderness Alternative for the Bull Gulch WSA analyzes the impacts of adjusting the study area boundaries to resolve resource conflicts and manageability considerations.

Alternatives that were considered but eliminated from detailed study for all WSAs except Bull Gulch included expanding the WSAs to include major topographic features and adjusting boundaries to resolve resource conflicts and improve manageability. A description of these proposals and why they were eliminated from further consideration is included in Chapter 2.

## CONCLUSIONS

The results of the impact analysis for each alternative are discussed below by WSA:



## **SUMMARY**

### **EAGLE MOUNTAIN**

#### **Proposed Action (All Wilderness)**

The entire 330 acres would be recommended as suitable for wilderness designation as an addition to the existing Maroon Bells-Snowmass Wilderness. It would be proposed that administration of the area be transferred to the U. S. Forest Service through a boundary adjustment upon designation. Based on management identified in the RMP, and the USGS/USBM mineral survey and identified lack of development potential, no significant adverse effects would occur on other resource values or uses. Wilderness designation would benefit the area's wilderness characteristics through statutory protection and management and is consistent with the policies of the U. S. Forest Service and Pitkin County.

#### **No Wilderness/No Action**

No acreage would be recommended as suitable for wilderness designation. The area would be managed under the existing RMP for uses other than wilderness with emphasis on protecting visual quality. Other uses could be allowed subject to applicable regulations and protective stipulations. Although it is considered unlikely to occur, any development would degrade the wilderness characteristics of the WSA, primarily naturalness.

### **HACK LAKE**

#### **Proposed Action (All Wilderness)**

The entire 10 acres would be recommended as suitable for wilderness designation as an addition to the existing Flat Tops Wilderness. It would be proposed that administration of the area be transferred to the U. S. Forest Service through a cooperative agreement upon designation. Because of the WSA's location, lack of potential for other uses, the USGS/USBM mineral survey, and management identified in the RMP, no resource values or uses would be adversely affected. Wilderness designation would benefit the area's wilderness characteristics through statutory protection and management and is consistent with the policies of the U. S. Forest Service and Garfield County.

#### **No Wilderness/No Action**

No acreage would be recommended as suitable for wilderness designation. The area would be managed under the existing RMP with emphasis on providing primitive recreational opportunities. Because of the area's location, lack of potential for other uses, and management adopted in the RMP, wilderness values would not be adversely affected. Nondesignation would be inconsistent with the policies of the U. S. Forest Service and Garfield County.

### **BULL GULCH**

#### **Proposed Action (Partial Wilderness)**

A total of 10,414 acres would be recommended as suitable for wilderness designation. Based on management identified in the RMP and the USGS/USBM mineral survey, the only values or uses that would be lost in order to preserve wilderness values would be low potential for energy and mineral resources. Wilderness designation would benefit wilderness characteristics, special features, and visual quality in the suitable portion through statutory protection and management and would add local diversity to the National Wilderness Preservation System. It would be proposed that 636 acres of state-owned minerals within the suitable portion be acquired by the federal government to resolve manageability considerations. The nonsuitable portion of the WSA (4,586 acres) would be managed under the existing RMP with emphasis on forest management and wildlife habitat improvement. This management would allow harvesting of 0.65 million board feet of timber and 14,250 cords of fuelwood, improvement of 1,798 acres of crucial winter range for deer and elk, and continued recreational off-road vehicle use (approximately 200 visits annually). Wilderness characteristics, primarily naturalness, would be degraded in the nonsuitable portion. Wilderness designation of a portion of the WSA would be inconsistent with the policies of Eagle County.



## All Wilderness

The entire 15,000 acres would be recommended as suitable for wilderness designation. Resource values or uses that would be lost in order to preserve wilderness values include low potential for energy and mineral resources, 0.65 million board feet of sawtimber and 14,250 cords of fuelwood, opportunities to increase forage for wildlife on 1,798 acres of crucial winter range for deer and elk, and recreational off-road vehicle use (approximately 200 visits annually). Wilderness designation would benefit the area's wilderness characteristics, special features, and visual quality through statutory protection and management and would add local diversity to the National Wilderness Preservation System. It would be proposed that 636 acres of state-owned minerals within the WSA be acquired by the federal government to resolve manageability considerations. Wilderness designation of the WSA would be inconsistent with the policies of Eagle County.

## No Wilderness/No Action

No acreage would be recommended as suitable for wilderness designation. The area would be managed under the existing RMP for uses other than wilderness. Dispersed recreation opportunities and visual quality would be emphasized on approximately 9,852 acres of the WSA and forest management and wildlife habitat improvement would be emphasized in the remainder of the area. This management would allow harvesting of 0.65 million board feet of timber and 14,250 cords of fuelwood, improvement of 1,798 acres of crucial winter range for deer and elk, and continued recreational off-road vehicle use (approximately 200 visits annually). Other uses could be allowed subject to applicable regulations and protective stipulations. Wilderness characteristics, special features, visual resources, and other resource values on 9,852 acres of the area would receive protection through administrative actions adopted in the RMP. Wilderness characteristics, primarily naturalness, would be degraded in the remainder of the WSA. Nondesignation of the WSA would be consistent with the policies of Eagle County.

## CASTLE PEAK

### Proposed Action (No Wilderness/No Action)

No acreage would be recommended as suitable for wilderness designation. The area would be managed under the existing RMP for uses other than wilderness with emphasis on forest management, improvement of aquatic wildlife habitat, and dispersed recreation opportunities. This management would allow harvesting of 59 million board feet of timber, improvement of aquatic wildlife habitat on six miles of streams and one lake (3 acres), and continued recreational off-road vehicle use (approximately 150 visits annually) on designated routes. Other uses could be allowed subject to applicable regulations and protective stipulations. Wilderness characteristics, primarily naturalness, would be degraded throughout the WSA. Nondesignation of the WSA would be consistent with the policies of Eagle County.

## All Wilderness

The entire 11,940 acres would be recommended as suitable for wilderness designation. Resource values or uses that would be lost in order to preserve wilderness values include low potential for mineral resources, 59 million board feet of timber, and recreational off-road vehicle use (approximately 150 visits annually). Improvement of aquatic wildlife habitat on six miles of streams and one lake (3 acres) could be allowed if proposed projects would be determined to be consistent with wilderness management. It is assumed for the purpose of analysis that the same projects could be implemented as in the Proposed Action except mechanized equipment could not be used. Wilderness designation would benefit the area's wilderness characteristics through statutory protection and management. Wilderness designation of the WSA would be inconsistent with the policies of Eagle County.





# CHAPTER 1 INTRODUCTION AND PLANNING PROCESS

## PURPOSE AND NEED FOR ACTION

## CHAPTER ONE INTRODUCTION AND PLANNING PROCESS





# CHAPTER 1

## INTRODUCTION AND PLANNING PROCESS

### PURPOSE AND NEED FOR ACTION

The proposed action being considered in this document is to recommend a total of 10,754 acres in three WSAs as preliminarily suitable for wilderness designation. The remaining 16,526 acres in two WSAs are recommended as nonsuitable for wilderness designation. These recommendations will become final only if adopted by the Secretary of the Interior and the President. This EIS analyzes the potential impacts of the proposed action and reasonable alternatives to the proposed action. For the sake of convenience, the language in the text will assume the recommendations are final and will not change.

Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) directs the Secretary of the Interior to review areas of 5,000 acres or more of the public lands determined to have wilderness characteristics and to report his recommendations to the President as to each area's suitability or unsuitability for preservation as wilderness. The Bull Gulch and Castle Peak WSAs are being studied under this section of FLPMA. The Secretary is required to report his recommendations to the President by October 21, 1991. The President must then report his recommendations to Congress by October 21, 1993. Only Congress can designate areas as wilderness.

Section 202 of FLPMA provides authority through the land use planning process to study and to recommend areas not covered under Section 603. The Eagle Mountain and Hack Lake WSAs are being studied under this section of FLPMA. The study and reporting requirements for these areas are the same as for areas studied under Section 603, except that areas found to be nonsuitable do not have to be reported to Congress.

Under FLPMA, wilderness preservation is part of BLM's multiple use mandate. Wilderness values are recognized as part of the spectrum of resource values and uses to be considered in the land use planning process.

This Environmental Impact Statement (EIS) is an analysis of the effects of designation or nondesignation as wilderness of four Wilderness Study Areas (WSAs) in the Glenwood Springs Resource Area. The information in this EIS will assist the Secretary of the Interior in making recommendations to the President, assist the President in making recommendations to Congress, and finally, assist Congress

in deciding whether the WSAs should be designated as wilderness or released and managed for other resource values and uses.

### LOCATION

The four WSAs analyzed in this FEIS are located in the Glenwood Springs Resource Area, Grand Junction District, in western Colorado (see Map 1-1). The WSAs under study are shown in Table 1-1 and on Map 1-2.

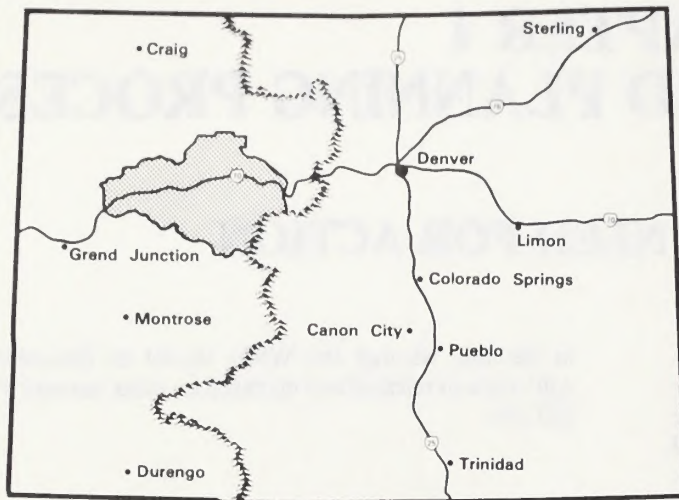
Table 1-1.

#### Wilderness Study Areas Analyzed in this FEIS

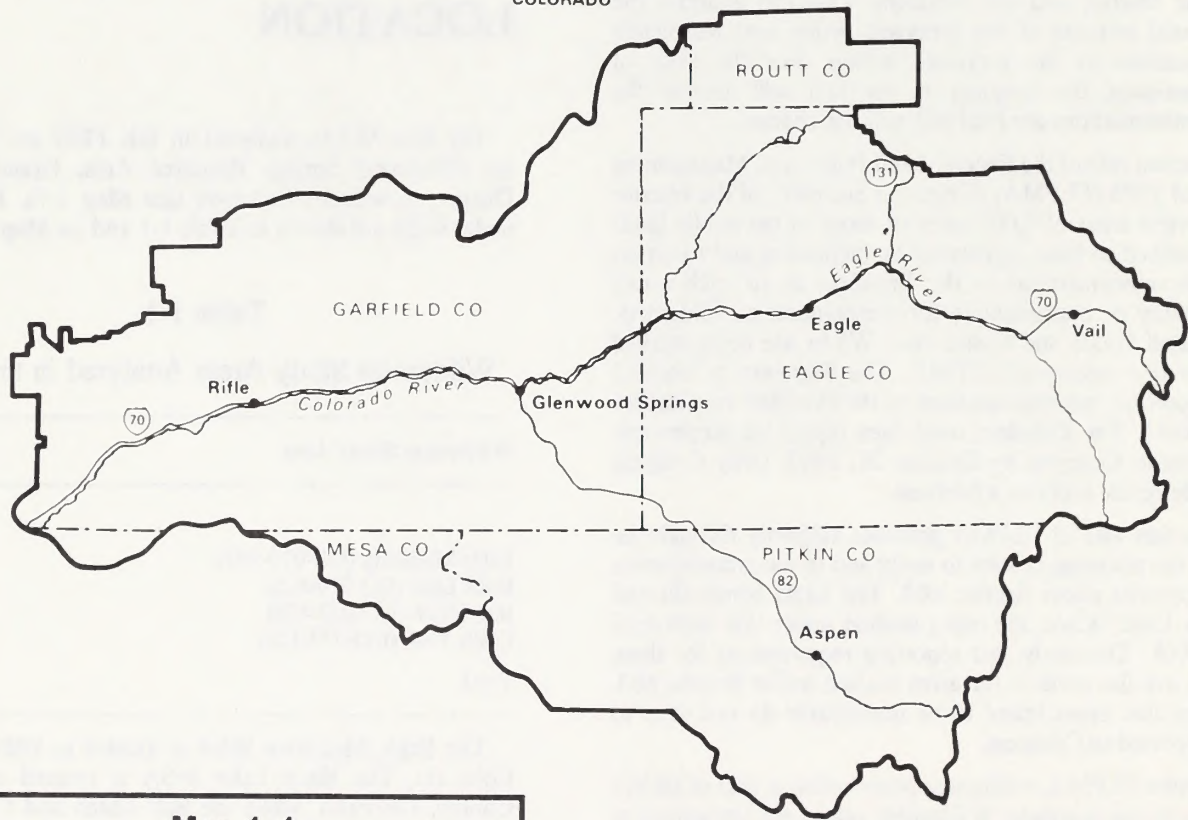
Wilderness Study Area	Acreage
Eagle Mountain (CO-070-392)	330
Hack Lake (CO-070-425)	10
Bull Gulch (CO-070-430)	15,000
Castle Peak (CO-070-433)	11,930
Total	27,280

The Eagle Mountain WSA is located in Pitkin County, Colorado. The Hack Lake WSA is located in Garfield County, Colorado, while the Bull Gulch and Castle Peak WSAs are located in Eagle County, Colorado.





COLORADO



**Map 1-1**  
**GLENWOOD SPRINGS**  
**RESOURCE AREA**  
**Location Map**





## CHAPTER 1

# WILDERNESS REVIEW

## PROCESS

To carry out the wilderness mandate of Section 603 of FLPMA, BLM developed a wilderness review process consisting of three phases: inventory, study, and reporting.

## INVENTORY

This phase involved examining the public land to determine and locate areas containing wilderness characteristics that meet the criteria established by Congress. Such areas were identified as WSAs.

The inventory phase of the process was completed for the Glenwood Springs Resource Area in November 1980. There were 30,630 acres found to contain wilderness characteristics in four WSAs.

FLPMA directs BLM to use the criteria given by Congress in the Wilderness Act of 1964 in determining these wilderness values. Section 2 (c) of that Act states: "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in the Act an area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions, and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunity for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value."

These characteristics are explained in detail in the *Wilderness Inventory Handbook-Policy, Direction, Procedures and Guidance for Conducting Wilderness Inventory of the Public Lands*-September 1978. The presence of these characteristics is documented in the publication *Intensive Wilderness Inventory-Final Wilderness Study Areas*-November 1980. Both of these publications are available at BLM offices.

Four areas totaling 30,630 acres in the Glenwood Springs Resource Area were found to possess wilderness characteristics and were identified as WSAs. This acreage was changed as a result of a Departmental Order amending the wilderness inventory decisions (*Federal Register*, Vol. 47, No. 251, December 30, 1982). This Order excluded the entire Eagle Mountain and Hack Lake WSAs from wilderness consideration under Section 603 of FLPMA because they were less than 5,000 acres in size. The order also said that split-estate acreages (federal surface/non-federal subsurface) in WSAs could not be considered under Section 603. The 636 acre split-estate parcel in the Bull Gulch WSA, was to be excluded from further study as identified in a Departmental Order published in the *Federal Register* on March 17, 1983 (Vol. 48, No. 53). The March 17, 1983, *Federal Register* notice also granted permission to continue consideration of the Eagle Mountain and Hack Lake WSAs for wilderness designation under Section 202 of FLPMA.

On April 18, 1985, a U.S. District Court Decision (*Sierra Club v. Watt*) vacated the amendment as it related to split-estate acreages and restored them, including the 636 acre area in the Bull Gulch WSA, to wilderness study under Section 603 of FLPMA. The court also held that the Secretary of the Interior has discretionary authority to study areas of less than 5,000 acres for wilderness. Following the court decision, the Secretary directed all areas of less than 5,000 acres would be studied under Section 202 of FLPMA, with the exception of those areas that had been previously studied under Section 202 of FLPMA and had been released by the BLM State Director at the conclusion of the study.

## STUDY

This phase involves the process of determining, through careful analysis, which wilderness study areas will be recommended as suitable for wilderness designation and which will be recommended as unsuitable. These determinations, made through the BLM land use planning system, consider all values, resources, and uses of the public lands. Guidance for the wilderness study process is provided by: BLM's *Wilderness Study Policy*, the National Environmental Policy Act (regulations in *Federal Register*, Vol. 43, No. 230, November 29, 1978), the Wilderness Act of 1964, the BLM's *Wilderness Management Policy*, and the BLM Planning Regulations (published in *Federal Register*, Vol. 48, No. 88, May 5, 1983).

For the Glenwood Springs Resource Area, the wilderness study phase was done through the Glenwood Springs Resource Management Plan. Analysis and preliminary recommendations concerning wilderness suitability were



## INTRODUCTION AND PLANNING PROCESS

included in the EIS on the RMP completed in June 1983. Originally, 30,630 acres in the Glenwood Springs Resource Area were considered for wilderness designation as shown in Table 1-2.

The Bull Gulch WSA was reduced to 14,364 acres by the amendment of wilderness inventory decisions and subsequently restored to 15,000 acres by court decision as explained previously.

Table 1-2.

### Original Acreage Considered for Wilderness Designation in the Glenwood Springs Resource Area

Wilderness Study Area	Acreage
Eagle Mountain	330
Hack Lake	3,360
Bull Gulch	15,000
Castle Peak	11,940
Total	30,630

Preliminary recommendations on the suitability or nonsuitability of each WSA were included in the FEIS on the RMP. The preliminary recommendations were accepted by the BLM Colorado State Director upon his approval of the RMP in a Record of Decision signed in January 1984.

Because there is no requirement to report the nonsuitable portions of areas studied under Section 202 of FLPMA to Congress, the 3,350 acres of the Hack Lake WSA found to be nonsuitable were released for uses other than wilderness by the approval of the RMP. The 27,280 acres identified as WSAs (see Table 1-1) is the acreage still under wilderness review that is analyzed in this document. This acreage represents approximately 5 percent of the 566,042 acres of public land in the Glenwood Springs Resource Area. The 10,754 acres recommended suitable for wilderness designation represent less than 2 percent of the resource area.

The study process for wilderness, as part of the RMP, includes four major steps:

#### 1. Development of Planning Criteria and Quality Standards

A scoping process takes place to determine issues and associated conflicts to be addressed in the RMP. For wilderness, this identification process was carried out at both a national and local level. Issues of national concern were identified during the development of the BLM's *Wilderness Study Policy*. Based on those issues, planning criteria and

quality standards were developed in the BLM's *Wilderness Study Policy* to direct the procedures for evaluation of suitability and nonsuitability of each WSA.

The planning criteria are:

##### a. Evaluation of Wilderness Values

Consider the extent to which each of the following components contributes to the overall values of an area for wilderness purposes:

\* **Mandatory wilderness characteristics:** The quality of the area's mandatory wilderness characteristics — size, naturalness, and outstanding opportunities for solitude or primitive recreation.

\* **Special features:** The presence or absence and the quality of the following optional wilderness characteristics — ecological, geological, or other features of scientific, educational, scenic, or historical value.

\* **Multiple resource benefits:** The benefits to other resources and uses which wilderness designation of the area would ensure.

\* **Diversity in the National Wilderness Preservation System:** The extent to which wilderness designation of the area under study would contribute to expanding the diversity of the National Wilderness Preservation System from the standpoint of each of the following factors:

(1) Expanding the diversity of natural systems and features, as represented by ecosystems and landforms.

(2) Expanding the opportunities for solitude or primitive recreation within a days driving time (5 hours) of major population centers.

(3) Balancing the geographic distribution of wilderness.

##### b. Manageability

The area must be capable of being effectively managed to preserve its wilderness character.

In addition to the planning criteria, a set of quality standards were developed to ensure consistency in evaluating the WSAs:

##### a. Energy and Mineral Resource Values

Consider any identified or potential energy and mineral resource values.

##### b. Impacts on Other Resources

Consider the extent to which other resource values or uses of the area would be foregone or adversely affected as a result of wilderness designation.



## CHAPTER 1

### c. Impact of Nondesignation on Wilderness Values

Consider the alternative use of land under study if the area is not designated as wilderness, and the extent to which the wilderness values of the area would be foregone or adversely affected as a result of this use.

### d. Public Comment

Consider comments received from interested and affected publics at all levels.

### e. Local Social and Economic Effects

Give special attention to adverse or favorable social and economic effects which designation of the area would have on local areas.

### f. Consistency with Other Plans

Consider consistency with officially approved and adopted resource-related plans of other federal agencies, state and local governments, and Indian tribes.

## 2. Issue Identification

At a local level, public meetings were held in Denver, Grand Junction, McCoy, Eagle, Glenwood Springs, and Rifle, Colorado, to identify the issues to be considered in the RMP for all resource values and uses. From the input at these meetings, four major issues for wilderness were identified:

- a. How much wilderness is needed?
- b. Protection of wilderness values.
- c. Management of backcountry areas to maintain primitive values as opposed to wilderness designation.
- d. The impacts of possible wilderness designation on other existing and future uses of public land. These uses include soils, water resources, minerals, aquatic and terrestrial wildlife, livestock grazing, vegetation, timber resources, recreation resources, economic conditions, cultural resources, visual resources, land tenure, and utility and communication facilities.

The issues considered in the RMP for all resource values and uses are described in Chapter 2 in the FEIS on the RMP.

## 3. Formulation of Alternatives

Each of the four WSAs were evaluated using the planning criteria and quality standards. Wilderness alternatives were identified and a comparison of existing and potential losses and gains for various resources was made in the context of the overall RMP alternatives. From this comparison, preliminary recommendations were made for each WSA and incorporated into the RMP alternatives.

## 4. Evaluation of Environmental Consequences

The fourth step of the planning process was to analyze the environmental impacts of the alternatives. A detailed analysis for each WSA was included in a technical supplement to the Draft Environmental Impact Statement (DEIS) on the RMP. Based upon the analysis, the Preferred Alternative in the DEIS was selected. The DEIS on the RMP was published in November 1982. The DEIS documented, for public review and comment, the results of the assessment of impacts for the Preferred and other alternatives for the WSAs. Comments received have been used to prepare the FEIS on the RMP and this FEIS. See the Public Comments and Responses to Comments section of Chapter 5 for further discussion of these comments.

In addition, all information, including the DEIS, FEIS on the RMP, USGS/USBM mineral surveys, and public comments were used to prepare this FEIS and Wilderness Study Report (WSR). When the FEIS and the WSR were approved by the BLM State Director and forwarded to the Washington Office of BLM for review, the study phase was completed.

## ENVIRONMENTAL ISSUE IDENTIFICATION/SCOPING

The DEIS and FEIS on the RMP analyzed the impacts of various management actions on all resource values and uses, including wilderness values, in the Glenwood Springs Resource Area. This FEIS analyzes only the impacts that would result from wilderness designation or nondesignation of the four WSAs in the resource area (see Table 1-1).

The scoping process for this FEIS encompassed issues identified for the WSAs by the public during the formal scoping period for the RMP process, by the BLM staff during the scoping period and the environmental analysis for the RMP, and from comments on the DEIS on the RMP by the public and Federal, State, and local agencies. These issues were then screened and compiled to determine which issues would or would not be considered in the FEIS.

Many issues considered in the RMP process were not applicable to each WSA (e.g., a resource value does not exist in a WSA) or were resolved through decisions made in the Record of Decision for the RMP (e.g., decisions to exclude certain forested lands from management and harvesting regardless of wilderness designation). The Record of Decision for the RMP also established required management stipulations that will be included in project designs to mitigate impacts to resource values. During the screening process, it was also determined the impacts on



## INTRODUCTION AND PLANNING PROCESS

some values or uses would be insignificant and did not warrant detailed analysis in this FEIS. The issues identified for analysis in this FEIS and the issues identified in scoping that were not selected for detailed analysis in this FEIS for each WSA are described below. The reasons for setting aside an issue for a WSA or WSAs are explained and any issue set aside for an individual WSA will not be analyzed further. When the reason for setting aside an issue is the determination that impacts would be insignificant, a summary of the analysis that resulted in that determination is provided. Additional detail is contained in Chapter 4 of the FEIS on the RMP. Table 1-3 graphically displays the issues analyzed for each WSA in this FEIS.

Geology/paleontology, climate, and alluvial valleys/prime and unique farmlands would not be affected by any of the alternatives in any of the WSAs and are not described in this document. Topography would also not be affected by any of the alternatives but is described as part of the setting of each WSA in Chapter 3.

1. **Impacts on Air Quality.** Air quality classification is the prerogative of the states and must follow a process mandated by the Clean Air Act Amendments of 1977. The *Wilderness Management Policy* states that BLM will manage all wildernesses to comply with the existing air quality classification for that specific area, so wilderness designation or nondesignation would not cause the air quality classification to change.

Adverse impacts on air quality would be the result of other resource management actions permitted if an area would not be designated as wilderness. The impacts from all resource management actions proposed or anticipated within the WSAs were considered. No management actions were identified in the Eagle Mountain, Hack Lake, and Castle Peak WSAs that would adversely affect air quality. In the Bull Gulch WSA, vegetation manipulations practices would cause very short-term localized impacts on air quality. The impacts would not be significant because they would be within the constraints of the existing Class II air quality standards and all applicable local, state, and federal air quality policies, regulations, and statutes would be followed. Only an average of 38 acres or 0.3 percent of WSA would be treated annually.

Therefore, this issue was dropped from further analysis for all WSAs in this FEIS.

2. **Impacts on Water Resources.** Three impact topics for water resources were identified: (a) impacts on erosion and sedimentation, (b) impacts on bacteria level, and (c) impacts on water rights from wilderness designation.
  - a. **Impacts on Erosion and Sedimentation.** Wilderness designation would preclude surface-disturbing activities that could increase erosion rates and sedimentation. If an area would not be designated as wilderness, surface disturbing activities could be permitted. However, the

Table 1-3.

Issues Analyzed For Each WSA In This FEIS

Issue	Eagle Mountain WSA	Hack Lake WSA	Bull Gulch WSA	Castle Peak WSA
1. Impacts on Erosion and Sedimentation			X	X
2. Impacts on Energy and Mineral Development	X	X	X	X
3. Impacts on Aquatic Wildlife Habitat and Populations				X
4. Impacts on Terrestrial Wildlife Habitat and Populations			X	X
5. Impacts on Timber Production			X	X
6. Impacts on Recreational Opportunities and Use			X	X
7. Impacts on Wilderness Values	X	X	X	X



## CHAPTER 1

potential for mineral exploration and development is low. The impacts from all resource management actions proposed or anticipated within the WSAs were considered. No management actions were identified in the Eagle Mountain and Hack Lake WSAs that would change existing erosion or sedimentation rates. Timber management including road construction in the Bull Gulch and Castle Peak WSAs and vegetation manipulation practices (primarily controlled burns) in the Bull Gulch WSA could impact soil erosion and sedimentation rates.

Therefore, this impact topic was dropped from further analysis for the Eagle Mountain and Hack Lake WSAs, but is analyzed for the Bull Gulch and Castle Peak WSAs.

b. Impacts on Bacteria Levels. Bacteria levels are not an issue in the Eagle Mountain or Hack Lake WSAs because no springs or streams exist in either WSA. In the Bull Gulch and Castle Peak WSAs, it was determined that changes in bacteria levels were primarily related to livestock grazing management. Since livestock grazing management would not change under any of the alternatives in any of the WSAs (see also Issue 7), bacteria levels would also not change.

Therefore, this impact topic was dropped from further analysis for all WSAs in this FEIS.

c. Impacts on Water Rights. Wilderness designation would not be expected to have a significant effect on any existing water rights in any of the WSAs. Both the *Wilderness Act* and Bureau of Land Management *Wilderness Management Policy* recognize valid existing rights. In the case of water rights, if any reserved water rights are determined to be established by the act of designation, the priority date of that right would be junior to all rights existing at the time of designation. It would, therefore, not pre-empt any existing water rights. Furthermore, maintenance of existing water control structures that existed under valid permits or other authority prior to designation could continue.

An issue that has been recently raised is whether there would be an impact of a reserved wilderness water right on the transfer of existing rights within the stream system or through a transbasin diversion. Transfers from above or within a wilderness area to below the wilderness would clearly not be affected since no less water would be allowed to flow through the wilderness. Only where transfers could result in the movement of rights from below to within or above the wilderness is there a potential effect. No such transfers are currently known to be proposed within any of the WSAs. Even if at some future date such a transfer were proposed, the effects would likely be minimal if any. Limitations that would be placed on such a transfer because of wilderness would almost certainly be no more significant than those that would be automatically imposed by other

water rights more senior than any reserved wilderness water right. Even in the unlikely event that this were not the case, it is probable that flexibility could be provided to the water rightholder while still assuring complete protection of the specific wilderness values associated with water flows through the WSA. Mitigations, flow augmentation measures, water right exchanges, purchases or donations, and other legal avenues could provide the means to accomplish this.

Since there are no expected effects on existing water rights and no proposals to transfer water rights are known or anticipated that would be significantly affected, this impact topic was dropped from further analysis for all WSAs in this FEIS.

3. Impacts on Energy and Mineral Exploration and Development. If designated as wilderness, each WSA would be withdrawn from all forms of entry under the mining and mineral leasing laws. This withdrawal would affect the potential exploration and development of energy and mineral resources in the WSAs. However, these resources have low potential for exploration and development in all WSAs.

This issue is analyzed for all WSAs in this FEIS to determine what energy and minerals resources, if any, would be foregone.

4. Impacts on Hydropower Development. No hydropower development potential has been identified in the Eagle Mountain, Hack Lake, or Castle Peak WSAs.

The Federal Energy Regulatory Commission and the United States Geological Survey have identified several potential hydroelectric development sites located along the Colorado River downstream of the Bull Gulch WSA. The uppermost dam site is located just above the mouth of Sweetwater Creek (about 3 miles from the Bull Gulch WSA). USGS estimated that a dam 380 feet high located here would store 1.2 million acre feet and would have a generation capacity of 120,000 kilowatts. At a maximum pool of 6,600 feet, about 1,200 acres along the northwestern boundary of the Bull Gulch WSA would be inundated. Federal Power Sites Withdrawals currently exist on approximately 2,000 acres in the WSA. There are no specific hydroelectric projects proposed for this section of the Colorado River. During the Resource Management Plan, all regional EIS's were reviewed, including those on oil shale projects. None of these have proposed a hydroelectric or reservoir project on this section of the Colorado River.

The approximate 2,000 acres of powersite withdrawals along the northwestern edge of the Bull Gulch WSA have been in effect over 70 years yet no specific proposals have been developed during that period. The Federal Energy Regulation Commission states (Chapter 5, letter 8) that dam construction in this stretch of the Colorado River has not received "serious consideration" because the main line of



## INTRODUCTION AND PLANNING PROCESS

the Denver and Rio Grande Railroad (the AMTRAC line) would have to be relocated. The county road paralleling the river and a number of ranch houses would also have to be relocated.

Because any large scale dam project would require the relocation of the railroad, county road and ranch houses, and considering the historical lack of project proposals, hydropower development in this section of the Colorado River is considered highly unlikely regardless of Bull Gulch being designated or not designated wilderness. Therefore, hydropower development in Bull Gulch will not be discussed in this FEIS.

5. Impacts on Aquatic Wildlife Habitat and Populations. No aquatic habitat exists within the Eagle Mountain, Hack Lake, or Bull Gulch WSAs. The Castle Peak WSA does contain aquatic habitat in three streams and one lake that could be affected by resource management actions proposed or anticipated within the WSA if it would not be designated as wilderness. Improvement of aquatic habitat on these 3 streams and one lake could be allowed under wilderness designation if proposed projects would be determined to be consistent with wilderness management.

Therefore, this issue was dropped from further analysis for the Eagle Mountain, Hack Lake, and Bull Gulch WSAs, but is analyzed for the Castle Peak WSA in this FEIS.

6. Impacts on Terrestrial Wildlife Habitat and Populations. Wildlife habitat and populations could be affected by resource management actions proposed or anticipated within the WSAs if not designated as wilderness. The impacts from all resource management actions proposed or anticipated within the WSAs were considered. If the total acreage of vegetation were manipulated as proposed by all resources over the next 20 years, small game and nongame species composition and numbers would vary locally. However, composition and numbers would not significantly change in the long term because of the habitat diversity offered by public lands, the dispersed nature and small size of each project, and the short-term nature of disturbance in each project area.

Thus, only the effects on big game wildlife and habitat, specifically deer and elk, will be analyzed. No management actions were identified in the Eagle Mountain or Hack Lake WSAs that would adversely affect big game wildlife or habitat. The Bull Gulch and Castle Peak WSAs do contain big game wildlife and habitat that could be affected by resource management actions proposed or anticipated within the WSAs if they would not be designated as wilderness.

Wilderness designation would preclude implementation of identified habitat improvement projects only within the Bull Gulch WSA.

Therefore, this issue was dropped from further analysis for the Eagle Mountain and Hack Lake WSAs, but is analyzed for the Bull Gulch and Castle Peak WSAs in this FEIS.

7. Impacts on Threatened and Endangered Species. No threatened or endangered plant or animal species have been identified within the Eagle Mountain, Hack Lake, or Castle Peak WSAs. In the Bull Gulch WSA, no threatened or endangered plant species have been identified but hunting perches for bald eagles have been identified. The impacts from all resource management actions proposed or anticipated within the Bull Gulch WSA were considered, including formal consultation with the U. S. Fish and Wildlife Service. It was determined bald eagles would not be adversely affected, regardless of wilderness designation. In addition, any activities proposed in the future that could adversely affect threatened and endangered species would be subject to applicable laws and regulations requiring clearances and mitigation and further formal consultation with the U. S. Fish and Wildlife Service.

The U. S. Fish and Wildlife Service concurs with our finding that wilderness designation or nondesignation would have no effect on threatened and endangered species in the 4 WSAs (see letters 1 and 2). Therefore, this impact topic was dropped from further analysis for all WSAs in this FEIS.

8. Impacts on Livestock Grazing. The Wilderness Act and BLM's *Wilderness Management Policy* allow livestock grazing, where established prior to wilderness designation, to continue subject to reasonable regulations. Existing grazing may include not only the utilization of the forage resource but also the use and maintenance of livestock management improvements and facilities that were in existence when the area was designated as wilderness. Final allocations of AUMs for livestock grazing were made in the RMP for all WSA allotments and would not change as a result of wilderness designation.

The primary impact of wilderness designation on livestock grazing could be restrictions in the location or design of new improvements but would not be significant since no additional improvements are currently planned in any of the WSAs. Furthermore, new improvements could be constructed in the future, if necessary, if in accordance with the guidelines and management plans for the area and if the improvements would be primarily for the purposes of resource protection. Thus, livestock grazing management would not be expected to change under any of the alternatives in any of the WSAs.

Therefore, this issue was dropped from further analysis for all WSAs in this FEIS.



## CHAPTER 1

9. Impacts on Vegetation. Differences in impacts on vegetation including riparian condition between alternatives are minor. The differences that do exist result in impacts on wildlife habitat or erosion/sedimentation and are therefore addressed under these topics.
10. Impacts on Timber Production. In the RMP, forested land in the Eagle Mountain WSA was excluded from timber management and harvesting; this management would not change as a result of nondesignation. No productive forest land exists in the Hack Lake WSA. Wilderness designation would preclude timber management and harvesting in the Bull Gulch and Castle Peak WSAs.

Therefore, this issue was dropped from further analysis for the Eagle Mountain and Hack Lake WSAs, but is analyzed for the Bull Gulch and Castle Peak WSAs in this FEIS.

11. Impacts on Recreational Opportunities and Use. Wilderness designation could affect recreational opportunities and use by either precluding certain activities or by changing the setting (environment) in which the activities occur. If the WSAs are not designated as wilderness, recreational activities and environments could be affected by other resource management actions.

Neither designation nor nondesignation would significantly affect recreational opportunities or use in the Eagle Mountain and Hack Lake WSAs. Although no complete recreational use data for either WSA are available, use is estimated to be minimal (estimated 10 big game hunting visits annually in the Eagle Mountain WSA and no known use in the Hack Lake WSA). No resource management actions are proposed or anticipated in the WSAs that would change the existing recreational setting.

Wilderness designation would preclude ORV use in the WSAs. The Hack Lake WSA is closed to recreational ORV use and this management would not change as a result of nondesignation. The Eagle Mountain WSA is currently open to ORV use but no known use is occurring or expected because of unsuitable topography.

In the Bull Gulch and Castle Peak WSAs, wilderness designation would eliminate some recreational activities, such as recreational ORV use, and would affect the setting for other activities that could continue to occur. If the WSAs would not be designated, other resource management actions, such as timber harvesting, could affect recreational opportunities and use.

Therefore, this issue was dropped from further analysis for the Eagle Mountain and Hack Lake WSAs, but is analyzed for the Bull Gulch and Castle Peak WSAs in this FEIS.

12. Impacts on Cultural Resources. Generally, wilderness designation is not adverse to cultural resources because they will generally benefit from an area being designated as wilderness. Such designation legally precludes development, land disturbances, motorized use, and other damaging or intrusive human effects. Most wilderness users tend to be sensitive to their environment and thus are far less likely to "pothunt" than others. Wilderness areas totally eliminate access by road and thus eliminate the use of vehicles or heavy equipment for vandalism purposes. A 1979 study (Nickens, et al., 1979) has confirmed that cultural sites more than one half a mile from a road are much less vandalized than those sites near a roadway.

Inventory procedure is well-established and is done whenever surface disturbance occurs in a noninventoried area. Mitigation for site loss or damage is normally done when a site qualifies for inclusion in the National Register of Historic Places. This is required by law. Mitigation can range from site excavation and analysis to site avoidance through project redesign. If an area is not designated wilderness, it *may* be opened to development such as oil and gas, roads, timber sales, and other surface disturbing activities. Such disturbances may cause destruction to significant cultural resources and can open up regions without previous access. Increased access can provide vandals and "pothunters" easy ability to loot and the damage to cultural resources can increase greatly. It should be noted, however, that most all development on the public lands requires inventory and mitigation for cultural resources, thus providing legal protection which occurs whether an area is designated as wilderness or not.

At the time a wilderness management plan is developed, procedures for the identification and protection of cultural resources will be considered as part of that process. This will include inventory, when appropriate, mitigation as needed, and consultation with the State Historic Preservation Officer as required under 36 CFR 800.4. No known cultural resources exist within the Eagle Mountain or Hack Lake WSAs. Cultural resources have been identified in the Bull Gulch and Castle Peak WSAs. These consist primarily of lithic scatters. None have been identified as being eligible for nomination to the National Register of Historic Places. The possible impacts from all proposed or anticipated resource management actions within the WSAs were considered. The State Historic Preservation Officer was consulted and concurs (see Chapter 5, letter 16) that neither wilderness designation nor nondesignation would be expected to significantly affect cultural resources in these 4 WSAs.

Therefore, this issue was dropped from further analysis for all WSAs in this FEIS.



## INTRODUCTION AND PLANNING PROCESS

13. Impacts on Wilderness Resources. Two impact topics were identified for wilderness resources: (a) impacts on wilderness values and (b) impacts on wilderness demand.

- a. Impacts on Wilderness Values. The wilderness values of naturalness, opportunities for solitude, opportunities for primitive recreation, and various special features of the WSAs would benefit from wilderness designation. The same values may be adversely affected by uses and actions that would be permitted should the WSAs not be designated as wilderness.

Therefore, this impact topic is analyzed for all WSAs in this FEIS.

- b. Impacts on Wilderness Demand. Estimates indicate wilderness recreation use of the four WSAs, if all would be designated as wilderness, would be less than one percent of the total use in the local region in the year 2000. Thus, neither designation nor nondesignation would have a significant effect on satisfying future wilderness demand.

Therefore, this impact topic was dropped from further analysis for all WSAs in this FEIS.

14. Impacts on Utility and Communication Facility Development. In the RMP, a zoning classification system for such facilities was adopted. The Hack Lake WSA and 9,852 acres of the Bull Gulch WSA were classified as unsuitable for such facilities and any future proposals would be rejected regardless of wilderness designation. The Eagle Mountain WSA, Castle Peak WSA, and 5,148 acres of the Bull Gulch WSA were classified as sensitive for such facilities. Applications within sensitive zones would be considered only if mitigation measures would reduce the potential impacts of proposals on sensitive resources. Wilderness designation would change the classification to unsuitable and preclude any future development. No significant adverse impacts are anticipated because there are no proposals for such facilities within these WSAs and because of the availability of alternative locations for such facilities outside of the WSAs.

Therefore, this issue was dropped from further analysis for all WSAs in this FEIS.

15. Impacts on Private or State Inholdings. The Eagle Mountain, Hack Lake, and Castle Peak WSAs do not contain any private or state inholdings. The Bull Gulch WSA does not contain any private inholdings but does contain 636 acres of split-estate land (federal surface/state-owned subsurface) which has low mineral potential. No exploration or development is projected in any of the alternatives.

The issue of how wilderness designation or nondesignation could affect non-federal mineral inholdings was identified in the scoping process. This issue was dropped because no activity is expected and the uses on these lands would not change as a result of wilderness designation or nondesignation. Also, BLM is required to allow access to inholdings in a designated wilderness. Designation or nondesignation would not impact non-federal inholdings; therefore, inholdings are not an issue in this FEIS.

Therefore, this impact topic was dropped from further analysis for the Eagle Mountain, Hack Lake, and Castle Peak WSAs, but is analyzed for the Bull Gulch WSA in this FEIS.

16. Impacts on Social Conditions. The impacts of wilderness designation on social conditions were considered. It was determined that local social impacts of any suitable or unsuitable wilderness recommendations would be insignificant. Relative to the currently available wilderness acreage and wilderness opportunities near the resource area, any proposals considered in this FEIS would not significantly affect the quality of life or lifestyles in the local area.

Therefore, this issue was dropped from further analysis for all WSAs in this FEIS.

17. Impacts on Economic Conditions. Two impact topics for economic conditions were identified: (a) impacts from resource management as affected by wilderness designation and (b) economic analysis of wilderness designation.

- a. Impacts from Resource Management. No mineral production is presently occurring, no economic supplies of minerals have been identified, and no development is anticipated because of the identified low potential within any of the WSAs. Thus, economic conditions related to minerals are not expected to be affected under any of the alternatives. Because livestock grazing would not be significantly affected in any of the WSAs under any alternative (see also Issue 8), economic conditions related to livestock grazing would also not be affected.

If the Bull Gulch and Castle Peak WSAs would be designated as wilderness in their entirety, proposed timber harvesting would be precluded (see also Issue 10). The proposed average annual harvest levels of eight thousand board feet of sawtimber and 300 cords of fuelwood in the Bull Gulch WSA and .66 million board feet of sawtimber in the Castle Peak WSA would generate an estimated \$78,000 per year increase in local income. Although the loss of this income would adversely impact the local forest products industry, the effect on the overall economy would not be significant. The merchantable timber proposed to be harvested yearly in the Bull Gulch and Castle Peak WSA



## CHAPTER 1

is less than 2 percent of the 35.9 million board feet harvested annually on the surrounding White River National Forest.

Economic conditions related to recreational use within the WSAs would not be affected. Except for recreational off-road vehicle (ORV) use, which would be precluded in the Bull Gulch and Castle Peak WSAs by wilderness designation (see also Issue 11), all other existing recreational activities could continue to occur whether or not the WSAs are designated as wilderness. Because the ORV use foregone in the two WSAs is relatively low (200 visits annually in the Bull Gulch WSA and 150 visits annually in the Castle Peak WSA) and because this use could be absorbed by other public land in the resource area, income generated by ORV use would not be affected.

Therefore, this impact topic was dropped from further analysis for all WSAs in this FEIS.

b. **Economic Analysis of Wilderness Designation.** The economic significance of these 4 WSAs totaling 27,280 acres is considered minimal when viewed in relation to the 647,059 acres (7 areas) of designated wilderness on the surrounding White River National Forest. A study of wilderness in Colorado (*Walsh 1981*) estimated the economic value of wilderness in Colorado by measuring wilderness recreation use and preservation values. The study was conducted on a state-wide basis and the values were partially based on potential increases in wilderness acreage throughout the state. The Walsh study does indicate that wilderness preservation has intrinsic value, even to those who may never actually visit an area. Because the study was not site-specific and because of the abundance of existing wilderness near the Glenwood Springs Resource Area and the relatively small acreage of the four WSAs, these values may not be appropriate.

Therefore, this impact topic was dropped from further analysis for all WSAs in this FEIS.

## OTHER WILDERNESS STUDY CONSIDERATIONS

The extent to which wilderness designation of an area under study would contribute to expanding the diversity of the National Wilderness Preservation System (NWPS), a determination of whether an area can be effectively managed as wilderness, and a determination of whether wilderness designation or nondesignation would be consistent with other agency plans and policies are requirements of the BLM's *Wilderness Study Policy*. Because these issues do not have environmental consequences, they will not be analyzed in detail in this document, but will

be discussed in the Wilderness Study Report. Brief information on each of these issues as they relate to the four WSAs follows:

1. **Diversity in the NWPS.** This topic has three components: (a) expanding the diversity of natural systems and features, (b) expanding wilderness opportunities within a day's drive of major population centers, and (c) balancing the geographic distribution of wilderness.

a. **Natural Systems and Features.** All four WSAs are within the ecoregion defined by Bailey (1978) as the southern Rocky Mountain forest province. The Eagle Mountain, Hack Lake, and Castle Peak WSAs are characterized by the vegetative type defined by Kuchler (1964) as the western spruce-fir forest which is prevalent in existing wildernesses near the Glenwood Springs Resource Area in Colorado, and in the northern and middle Rocky Mountain physiographic regions. The Bull Gulch WSA is dominated by the vegetative type defined by Kuchler as juniper-pinyon woodlands. This WSA is the only area within the local region with wilderness potential for this vegetation type. However, the juniper-pinyon woodlands vegetation type is prevalent in the physiographic regions to the west and south of the Glenwood Springs Resource Area and is the dominant vegetation type of numerous BLM and National Park Service WSAs in the states of Utah, Arizona, New Mexico and also BLM WSAs in western Colorado outside the southern Rocky Mountain physiographic region. Thus, designation of any of the WSAs would not significantly expand natural systems and features in the NWPS, but designation of the Bull Gulch WSA would provide an ecosystem/landform that is not represented in the local wilderness supply.

b. **Major Population Centers.** Standard Metropolitan Statistical Areas (SMSAs) within a day's driving time (5 hours) of the Glenwood Springs Resource Area are shown in Table 1-4. Approximately 3 million acres of existing designated wilderness and numerous areas under wilderness study are within a day's driving time of one or more of these population centers. Thus, designation of any of the WSAs would not significantly expand wilderness opportunities within a day's drive of major population centers.

c. **Geographic Distribution.** The State of Colorado contains 2,676,540 acres of designated wilderness. The local area, adjacent to the Glenwood Springs Resource Area, contains eight designated wildernesses totaling 997,824 acres. An additional 8,000 acres is proposed as an addition to one of these areas. Thus, designation of any of the WSAs would not significantly expand the geographic distribution of wilderness.



## INTRODUCTION AND PLANNING PROCESS

Table 1-4.

### Standard Metropolitan Statistical Areas within 5-Hours Drive of the Glenwood Springs Resource Area

Area	County	Population <sup>1</sup>	Distance
Denver/Boulder	Adams Arapahoe Boulder Denver Douglas Gilpin Jefferson	1,619,921	3-½ hours
Colorado Springs	El Paso Teller	317,458	4-½ to 5 hours
Fort Collins	Larimer	149,184	4-½ to 5 hours
Greeley	Weld	123,43	4-½ to 5 hours
Pueblo	Pueblo	125,972	5 hours
Total Population		2,335,973	

<sup>1</sup> Colorado Division of Planning, 1980 census figures

Note: A standard metropolitan statistical area is defined as a county with at least one city of 50,000 inhabitants or more plus as many adjacent counties metropolitan in character which are socially integrated with that central city or cities.

2. Manageability. All four WSAs could be managed as wilderness. The potential for powersite development and the state-owned minerals in the Bull Gulch WSA are the only resource values/conflicts in any of the WSAs considered to have any manageability implications. However, because neither powersite nor mineral development is anticipated within the Bull Gulch WSA, these values would not be expected to significantly affect manageability.

The lack of easily identifiable boundaries where property lines are used presents a minor manageability problem. Where this occurs, fencing or a system of signs and markers would be used to define the boundaries.

Because of their small size, the Eagle Mountain and Hack Lake WSAs would only be manageable for wilderness as additions to the Maroon Bells-Snowmass Wilderness and the Flat Tops Wilderness administered by the U. S. Forest Service. Providing for efficient and consistent management with the U. S. Forest Service would not be expected to be a problem.

3. Consistency with Other Plans and Policies. Designation of the Eagle Mountain and Hack Lake WSAs would be consistent with the plans and policies of the U. S. Forest Service, State of Colorado, Pitkin County, and Garfield County. Designation of the Bull Gulch WSA would be consistent with the policies of the State of Colorado but would not be consistent with the policies of Eagle County. Designation of the Castle Peak WSA would not be consistent with the policies of the State of Colorado nor Eagle County. Comments received on the DEIS from the above agencies are reprinted in Chapter 5.

## REPORTING

Upon the completion of this study, recommendations as to whether the WSAs are suitable or unsuitable for designation as wilderness will be made through the Secretary of the Interior to the President. Reports on all wilderness study areas must reach the President no later than October 21, 1991. Congress has the sole authority for designating any federal land as wilderness. Congress will take the recommendations submitted by the President along with any other information it may have obtained through its own sources and, after debate and counsel, will pass legislation that would formally designate WSAs as wilderness or release them for uses other than wilderness.

## CHANGES FROM THE DRAFT ENVIRONMENTAL IMPACT STATEMENT

This final environmental impact statement (FEIS) encompasses the wilderness portion of the *Draft Environmental Impact Statement (DEIS) on the Glenwood Springs Resource Management Plan (RMP)* and incorporates numerous changes and corrections that resulted from administrative actions and comments on the DEIS. The significant changes in the analysis that have been made between the DEIS and the FEIS are described below.



## CHAPTER 1

### Implementation of Resource Management Plan

In the DEIS, the affected environment described the existing resource values and uses that would be affected by the various management actions in the proposed RMP. Adoption of the RMP and the implementation of these management actions provide the basis for the analysis in this document. These actions are in two categories described below:

1. The RMP identifies management actions that are independent of a wilderness suitability recommendation and are compatible with the BLM's *Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP)* and BLM's *Wilderness Management Policy*. These actions were implemented upon approval of the RMP and, therefore, changed the existing environment in the wilderness study areas (WSAs). These actions are included in the descriptions of the affected environment for each WSA in Chapter 3 in this document. An example of this type of action is the establishment of an area of critical environmental concern (ACEC) within the Bull Gulch WSA.
2. The RMP also identifies management actions based on the preliminary suitability recommendations that would not be implemented until a Congressional decision is made. These actions include those that are incompatible with the IMP and the *Wilderness Management Policy* and those that would change if a suitability recommendation would not be accepted by Congress. These type of actions do not change the existing environment and will be discussed in the Environmental Consequences chapter in this document. An example of this type of action is timber management and harvesting in the Castle Peak WSA.

### No Action Alternative

The BLM's planning regulations and the *Wilderness Study Policy* require the identification and analysis of a No Action Alternative. In the DEIS, the No Action Alternative was the No Wilderness Alternative in the RMP's Continuation of Current Management Alternative. Because of the implementation of the RMP, the No Action Alternative in this FEIS has been expanded to reflect the management decisions adopted in the RMP such as the ORV designation in all WSAs and the Bull Gulch Recreation Management Area designation.

### Amendment of Wilderness Inventory Decisions

An amendment of wilderness inventory decisions, published in the *Federal Register* on December 30, 1982, excluded the entire Eagle Mountain and Hack Lake WSAs from wilderness consideration under Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) because they were less than 5,000 acres in size. This notice also identified that split-estate acreages (federal surface/nonfederal subsurface) in WSAs could not be considered for wilderness designation under Section 603. Specific split-estate acreages to be excluded from wilderness consideration, including 636 acres having state-owned minerals in the Bull Gulch WSA, were identified in a notice published in the *Federal Register* on March 17, 1983. The March 17, 1983, *Federal Register* notice also granted permission to continue consideration of the Eagle Mountain and Hack Lake WSAs for wilderness designation under Section 202 of FLPMA.

On April 18, 1985, a U.S. District Court Decision vacated the amendment as it related to split-estate acreages and restored them, including the 636 acre area in the Bull Gulch WSA, to wilderness study under Section 603 of FLPMA. The court also held that the Secretary of the Interior has discretionary authority to study areas of less than 5,000 acres for wilderness. Following the court decision, the Secretary directed all areas included in the litigation of less than 5,000 acres would be studied under Section 202 of FLPMA, with the exception of those areas that had been previously studied under Section 202 of FLPMA and had been released by the BLM State Director at the conclusion of the study.

### Hack Lake Wilderness Study Area

The Hack Lake WSA was studied for wilderness designation in the RMP under Section 202 of FLPMA. There is no requirement to report the nonsuitable portions of WSAs studied under this section to Congress. Of the original 3,360 acres studied, 3,350 acres were found to be nonsuitable during the planning process and were released for uses other than wilderness in the Record of Decision for the RMP signed by the BLM Colorado State Director in January 1984. Only the 10 acres of the WSA still under wilderness review are analyzed in this document.



## INTRODUCTION AND PLANNING PROCESS

### Bull Gulch Wilderness Study Area

The DEIS recommended the Bull Gulch WSA (15,000 acres) nonsuitable for wilderness designation. Based on public comment, 10,414 acres were recommended suitable in the FEIS. This included 636 acres of state-owned minerals which would be a suitable addition to the Bull Gulch Wilderness (should it be designated by Congress) provided the state-owned minerals can be exchanged. The State of Colorado has indicated a willingness to make such exchanges in BLM wilderness areas (State of Colorado Board of Land Commissioners, 1983).

### Minerals

Several changes in mineral leases and mining claims in WSAs have occurred since the DEIS was published. During the preparation of the DEIS, most of the Bull Gulch WSA and all of the Castle Peak WSA were leased for oil and gas. The majority of these leases have expired. Currently, 2,789 acres are leased for oil and gas in the Bull Gulch WSA and 318 acres are leased for oil and gas in the Castle Peak WSA. These are post-FLPMA leases having the wilderness protection stipulation. Development of these leases could not impair the WSA's wilderness characteristics. This stipulation would only be dropped if the WSAs are released by Congress from further wilderness review.

Since the DEIS, 7 new mining claims have been filed in the Eagle Mountain WSA. Currently, there are 21 unpatented lode claims in this WSA. Seven mining claims, 3 lode claims and 4 placer claims are abandoned and void in the Bull Gulch WSA due to lack of assessment work. Currently, there are no mining claims in the Hack Lake, Bull Gulch and Castle Peak WSAs. All sections relating to mineral leases and mining claims within the WSAs have been revised to include current information.

The Department of the Interior and Related Agencies Appropriations Act of 1984 (P.L. 98-146) contained language which prohibited mineral leasing in WSAs. Unless this policy is changed by Congress, new mineral leases would not be issued in WSAs unless they were released for uses other than wilderness through legislation. This decision did not affect leases issued prior to October 1, 1982.

In the DEIS, estimates of mineral resource potentials within the WSA were made with the best information available at that time. Since the DEIS was published, the mineral surveys required by Section 603 of FLPMA for areas recommended as preliminarily suitable for wilderness designation have been completed by the U. S. Geological Survey (USGS) and U. S. Bureau of Mines (USBM). The BLM prepared similar reports for the areas recommended as nonsuitable. Descriptions and estimates of mineral resource potentials and values within the WSAs have been revised to include this new information.



# THE HISTORY OF THE

The history of the world is a vast and complex subject, encompassing the lives of countless individuals and the events that have shaped our planet. From the earliest civilizations to the modern era, the story of humanity is one of constant change and evolution. The study of history allows us to understand the patterns of human behavior and the forces that have driven our progress. It is a discipline that seeks to uncover the truth about the past, providing us with a deeper understanding of our present and a glimpse into the future.

In the early days of the world, the first humans were small and primitive, living in simple huts and hunting for their food. Over time, they developed more advanced tools and techniques, and their societies grew in complexity. The rise of agriculture and the invention of writing marked significant milestones in human history. These developments allowed for the accumulation of knowledge and the establishment of permanent settlements. The story of the world is a testament to the resilience and ingenuity of the human race, as it has overcome countless challenges and achieved remarkable feats of achievement.

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## **CHAPTER TWO**

# **DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION**







# **CHAPTER 2**

## **DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **ALTERNATIVES CONSIDERED**

Two alternatives are assessed for all WSAs in this document: All Wilderness and No Wilderness.

The All Wilderness Alternative represents the maximum possible acreage that could be recommended as suitable for wilderness designation. Each WSA in the Glenwood Springs Resource Area would be recommended for wilderness designation using current WSA boundaries. Wilderness values present in each area would be preserved and utilization of minerals, timber, and other resources in the WSAs would be prohibited or restricted. The areas would be managed according to the Bureau's *Wilderness Management Policy* and the provisions of the 1964 Wilderness Act, which states that wildernesses shall be devoted to recreational, scenic, scientific, educational, conservation, and historical use.

The No Wilderness Alternative is equivalent to the No Action Alternative required by the National Environmental Policy Act and BLM's *Wilderness Study Policy*. Under this alternative, each WSA in the Glenwood Springs Resource Area would be recommended as nonsuitable for wilderness designation. The areas would be managed for uses other than wilderness as prescribed by the existing RMP.

In addition, a Partial Wilderness Alternative is considered for the Bull Gulch WSA. The purpose of the Partial Wilderness Alternative is to modify the boundary of the Bull Gulch WSA to eliminate conflicts with other resource values and to improve the manageability of the area as wilderness. The portion of the WSA recommended as suitable would be managed to preserve wilderness values and the nonsuitable portion would be managed for uses other than wilderness as prescribed in the RMP.

The suitability recommendations and management for the WSAs in each alternative are described in detail later in this chapter.

In BLM-initiated actions such as wilderness studies, the proposed action and the agency's preferred alternative are the same. For the sake of consistency and ease of understanding, the term Proposed Action will be used

throughout this EIS. As the alternatives for each WSA are discussed, the Proposed Action will be identified and discussed first. The Proposed Action for each WSA has been identified based on resource benefits and conflicts, manageability, and public input received throughout the planning process. Since the pattern of future actions within the WSAs cannot be predicted with complete certainty, assumptions and guidelines were made to allow the analysis of impacts under the Proposed Action and alternatives.

### **ALTERNATIVES CONSIDERED BUT ELIMINATED FROM ANALYSIS**

In studying the WSAs, various alternatives were considered but dropped from further analysis. These alternatives and the reasons for not pursuing them are described below.

#### **EXPANSION ALTERNATIVE**

The possibility of expanding the Eagle Mountain, Bull Gulch, and Castle Peak WSAs was considered, but was eliminated because areas of public land outside of the present boundaries of the WSAs were determined to lack wilderness characteristics. Expansion of the Hack Lake WSA was also eliminated from consideration. A larger acreage (3,360 acres) was originally analyzed in the EIS on the RMP and 3,350 acres were found to be nonsuitable and were released upon approval of the RMP.

#### **PARTIAL WILDERNESS ALTERNATIVE FOR ALL WSAs EXCEPT BULL GULCH**



## CHAPTER 2

The Eagle Mountain, Hack Lake, and Castle Peak WSAs were assessed for boundary adjustments to eliminate resource conflicts or improve manageability as wilderness. Based on management adopted in the RMP, neither the Eagle Mountain or Hack Lake WSAs had significant resource conflicts, and no suitable boundary could be identified within the Castle Peak WSA that would significantly reduce resource conflicts while maintaining essential wilderness values. In addition, there were no adjustments in any of the WSAs that were considered to improve the manageability of the areas as wilderness.

### OTHER RESOURCE MANAGEMENT ALTERNATIVES

The BLM's *Wilderness Study Policy* calls for the formulation and evaluation of alternatives ranging from resource protection to resource production. This requirement was met in the EIS on the RMP which analyzed four alternatives for management of the public lands in the Glenwood Springs Resource Area: (1) Continuation of Current Management, (2) Resource Protection, (3) Economic Development, and (4) Preferred. The analysis of these alternatives included the impacts of wilderness designation, nondesignation, or partial designation of the four WSAs and is documented in the EIS on the RMP and the technical supplement to the DEIS on the RMP. Reanalysis of alternatives for management of other resources within the WSAs would be duplicative and is not considered to be appropriate since management direction for all resources was established when the RMP was approved.

### ALTERNATIVES CONSIDERED AND ANALYZED IN DETAIL

In this section, the suitability recommendations and management of resources under the alternatives considered for each WSA will be described. Only those resources in a WSA for which management actions were adopted in the RMP or for which management would change between alternatives will be discussed. Management of resources in a WSA for which specific actions are not identified will be custodial in nature (e.g., monitoring). Management actions relating to issues not selected for analysis in this FEIS are included in order to provide the complete management

prescription for each WSA. These actions also have implications on the issues selected for analysis. Required stipulations on management actions to mitigate adverse impacts are included in the descriptions if applicable to the particular WSA. A complete list of the required management stipulations adopted in the RMP is included in Appendix 2. Standard stipulations for oil and gas leasing are listed in Appendix 3.

The impacts under each alternative for each WSA are summarized in Tables 2-1 through 2-4 which are located at the end of this chapter. Only the issue topics selected for detailed analysis for a particular WSA (see Table 1-4) are included in these tables.

### EAGLE MOUNTAIN WILDERNESS STUDY AREA

#### PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)

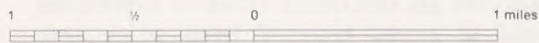
The entire 330 acres of public land in the Eagle Mountain WSA would be recommended as suitable for wilderness designation (see Map 2-1).

#### Energy and Mineral Resources Actions

Wilderness designation would withdraw 330 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. No mineral leases are within the WSA. No development of the 23 mining claims that are presently located within the WSA is anticipated because of the identified low potential for all minerals. If exploration or development activities would be proposed on any of the existing claims or any other mining claims that would exist at the time of designation, validity examinations would be conducted prior to approving proposed plans of operations. Plans of operations would be denied for claims determined to be invalid. Plans of operations approved for valid claims would have to include provisions to ensure that:

1. There will be no unnecessary or undue degradation of wilderness character.
2. If mechanical or motorized equipment, including helicopter and fixed wing aircraft (beyond casual use), will be used, there is no reasonable alternative.





2-3



## **CHAPTER 2**

3. The reclamation measures included in the plan of operations are adequate to provide for restoration as near as practicable of the surface of the land disturbed.

### **Livestock Grazing Actions**

The entire WSA (330 acres) will continue to be allotted for livestock grazing at the existing level of 17 animal unit months (AUMs). Currently, no range developments are planned within the WSA.

### **Timber Resources Actions**

Productive forest land within the WSA, totaling 190 acres, are identified as unsuitable for management and would not be available for harvesting.

### **Recreation Resources Actions**

The entire WSA (330 acres) would be closed to off-road vehicle (ORV) use. Currently, no recreation developments are planned within the WSA. The WSA would be managed to provide for continuing nonmotorized recreational opportunities such as hunting and hiking in a natural setting. Use levels are expected to remain approximately the same as existing levels (estimated 10 visits annually).

### **NO WILDERNESS (NO ACTION ALTERNATIVE)**

The entire 330 acres of public land in the Eagle Mountain WSA would be recommended as nonsuitable for wilderness designation (see Map 2-1).

### **Energy and Mineral Resources Actions**

The entire WSA (330 acres) would be open to appropriation under the mining and mineral leasing laws. Exploration and development of mineral resources would be allowed subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. No development is anticipated because of the identified low potential for all minerals. Because of the annual "assessment work" required to keep mining claims current, minor exploration activities are anticipated. However, exploration is not expected to exceed historical levels which have produced no discernible surface disturbance.

### **Livestock Grazing Actions**

Management of livestock grazing would be the same as described under the All Wilderness Alternative.

### **Timber Resources Actions**

Management of timber resources would be the same as described under the All Wilderness Alternative.

### **Recreation Resources Actions**

Except for the ORV designation, recreation management would be the same as described under the All Wilderness Alternative. In this alternative, the entire WSA (330 acres) would be open to ORV use, but no known use is presently occurring nor anticipated.

A summary of environmental impacts for Eagle Mountain WSA is shown in Table 2-1.

## **HACK LAKE WILDERNESS STUDY AREA**

### **PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)**

The entire 10 acres of public land in the Hack Lake WSA would be recommended as suitable for wilderness designation (see Map 2-2). There is no livestock grazing in this unit.

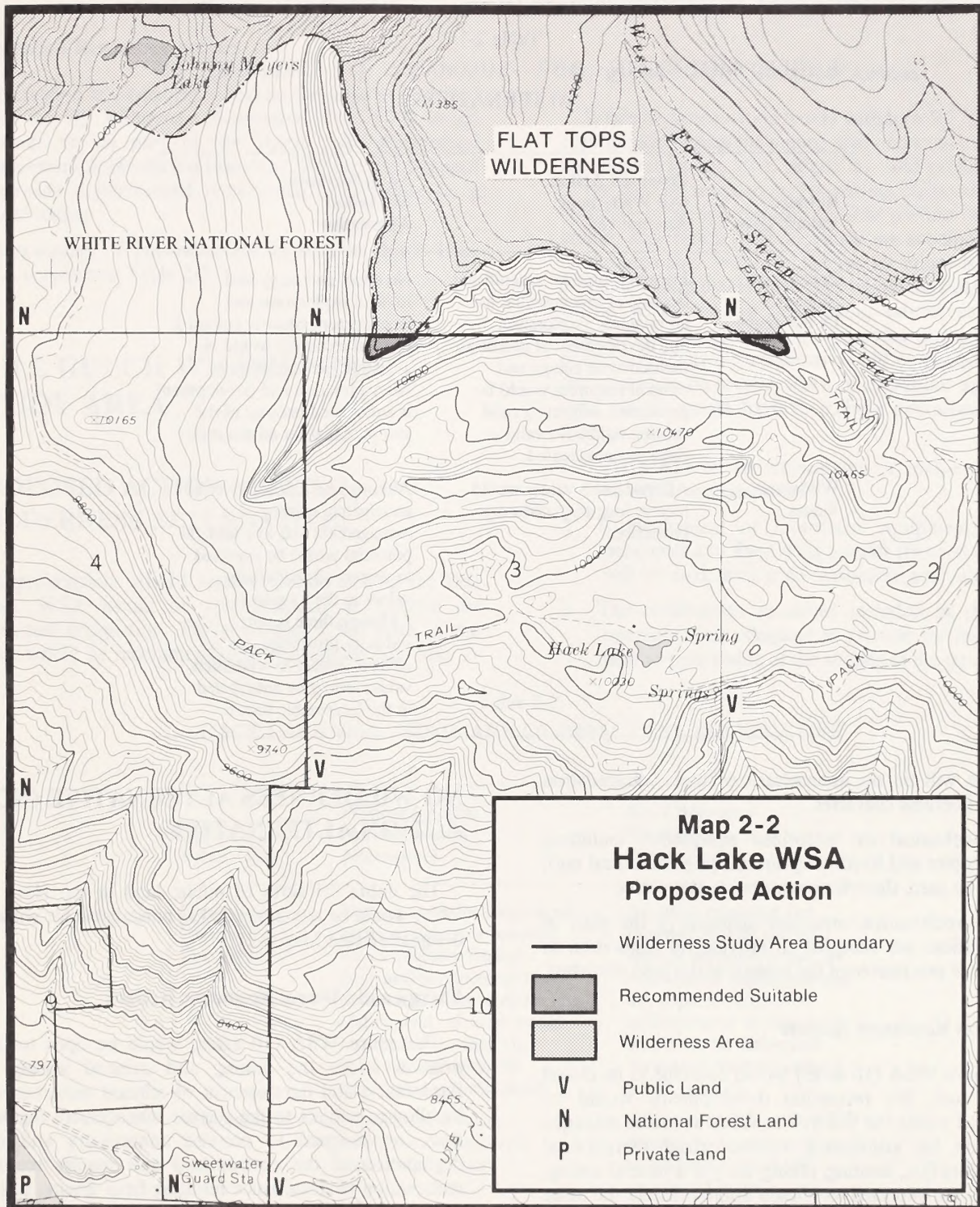
### **Energy and Mineral Resources Actions**

Wilderness designation would withdraw the entire WSA (10 acres) from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. No mining claims or leases are currently located within the WSA and no exploration or development are anticipated because of the identified low potential for all minerals.

However, if any mining claims would be located within the WSA prior to designation, validity examinations would be conducted prior to approving proposed plans of operations. Plans of operations would be denied for claims determined to be invalid. Plans of operations approved for valid claims would have to include provisions to ensure that:



R 87 W



0 1/2 1 mile  
Elevations and Contours in Feet  
Contours at 40 Foot Intervals



## CHAPTER 2

Table 2-1.  
EAGLE MOUNTAIN WSA—SUMMARY OF IMPACTS BY  
ALTERNATIVE

Resource Values/Uses	Proposed Action (All Wilderness Alternative)	No Wilderness/ No Action Alternative
Energy and Mineral Development	Impacts would be insignificant because of low potential for all minerals. Exploration and development of potential, undiscovered energy and mineral resources would be prohibited, subject to valid existing rights. No valid rights are anticipated.	No effect on energy and mineral exploration and development because potential mineral resources would be available for development. No exploration and development is anticipated because of the low potential for all minerals
Wilderness Values	All wilderness values would receive long-term statutory protection.	Although no development is anticipated, existing management and low mineral potential would be expected to protect all wilderness values in the long term. Although there is not statutory protection, no adverse impact to wilderness values would be anticipated in the foreseeable future.

1. There will be no unnecessary or undue degradation of wilderness character.
2. If mechanical or motorized equipment, including helicopter and fixed wing aircraft (beyond casual use), will be used, there is no reasonable alternative.
3. The reclamation measures included in the plan of operations are adequate to provide for restoration as near as practicable of the surface of the land disturbed.

### Recreation Resources Actions

The entire WSA (10 acres) would continue to be closed to ORV use. No recreation developments would be constructed within the WSA. The WSA would be managed to provide for continuing nonmotorized recreational opportunities (i.e., hunting, hiking, etc.) in a natural setting. Use levels are expected to remain approximately the same as existing levels. No use has been documented in the WSA.

### NO WILDERNESS ALTERNATIVE (NO ACTION ALTERNATIVE)

The entire 10 acres of public land in the Hack Lake WSA would be recommended as unsuitable for wilderness designation (see Map 2-2).

### Energy and Mineral Resources Actions

The entire WSA (10 acres) would be open to appropriation under the mining and mineral leasing laws. Exploration and development of mineral resources would be allowed subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. A no surface facilities stipulation would be attached to any oil and gas leases issued within the WSA. No mining claims or leases are currently within the WSA and no exploration or development are anticipated because of the identified low potential for all minerals.



## DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

### Recreation Resources Actions

Recreation management would be the same as described under the All Wilderness Alternative. The WSA would continue to be part of the Hack Lake Recreation Management Area which is closed to ORV use and managed to provide nonmotorized recreational opportunities in a natural setting.

A summary of environmental impacts for Hack Lake WSA is shown in Table 2-2.

### BULL GULCH WILDERNESS STUDY AREA

#### PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE)

Approximately 10,414 acres of public land in the Bull Gulch WSA would be recommended as suitable for wilderness designation. The remaining 4,586 acres of the WSA would be recommended as nonsuitable (see Map 2-3).

### Energy and Mineral Resources Actions

Wilderness designation would withdraw 9,778 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. No mining claims or leases are currently located within the suitable portion of the WSA and no exploration or development are anticipated because of the identified low potential for all minerals. However, if mining claims would be located within the suitable portion of the WSA prior to designation, validity examinations would be conducted prior to approving proposed plans of operations. Plans of operations would be denied for claims determined to be invalid. Plans of operations approved for valid claims would have to include provisions to ensure that:

1. There will be no unnecessary or undue degradation of wilderness character.
2. If mechanical or motorized equipment, including helicopter and fixed wing aircraft (beyond casual use), will be used, there is no reasonable alternative.
3. The reclamation measures included in the plan of operations are adequate to provide for restoration as near as practicable of the surface of the land disturbed.

Table 2-2.

HACK LAKE WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses	Proposed Action (All Wilderness Alternative)	No Wilderness/ No Action Alternative
Energy and Mineral Development	Impacts would be insignificant because of the low potential for all minerals. Exploration and development of potential, undiscovered energy and mineral resources would be prohibited, subject to valid existing rights. No valid rights are anticipated.	No effect on energy and minerals because potential mineral resources would be available for exploration and development. However, exploration or development would not be anticipated because of the low potential for all minerals.
Wilderness Values	All wilderness values would receive long-term statutory protection.	Although there is no statutory protection, no adverse impacts to wilderness values are anticipated in the foreseeable future. Existing management and low mineral development potential would be expected to protect all wilderness values in the long-term.



## CHAPTER 2

Initially, the 636-acre area of state-owned minerals within the suitable portion (see Map 3-1) would be open to mining and mineral leasing at the State's discretion. Currently, no leases exist within this area and no exploration or development are anticipated. If the mineral estate would be acquired, this area would also be withdrawn from all forms of appropriation and managed the same as the remainder of the suitable portion.

The nonsuitable portion of the WSA (4,586 acres) would continue to be open to appropriation under the mining and mineral leasing laws. There are no existing pre-FLPMA leases and 2,789 leases of post-FLPMA lease in the nonsuitable portion. The wilderness stipulation on these leases would prevent impairment of wilderness values.

A no surface facilities stipulation would be attached to any oil and gas leases within 1/2 mile of the Colorado River (approximately 207 acres) to protect riparian values and floodplains (see Map 3-1). Seasonal restrictions on oil and gas development would protect important seasonal big game habitat on 950 acres (see Map 3-1). Leases on the remaining 3,429 acres of the nonsuitable portion would be issued with the standard stipulations used for all leases.

### Terrestrial Wildlife Actions

Big game wildlife habitat would be managed consistent with the Colorado Division of Wildlife's populations goals for deer and elk. The population goals for 1988 are a 22 percent increase for deer (estimated current population is 700) and a 5 percent decrease for elk (estimated current population is 175). Management actions in the suitable portion of the WSA would be custodial in nature and would be directed toward protection of crucial winter range for both species. No habitat improvement projects are planned within the suitable portion of the WSA (10,414 acres).

In the nonsuitable portion of the WSA (4,586 acres), mineral leasing would be restricted by the seasonal stipulations identified under the Energy and Mineral Resources Actions for this alternative. In addition, wildlife habitat improvement projects would be implemented to enhance crucial winter range for deer and elk. Following wood harvesting in productive woodlands, sale areas would be seeded and converted to forage species for deer and elk (see Map 3-2). An average of 22 acres would be seeded annually. Up to 750 acres of the 1,079 acres of sagebrush areas identified as suitable for vegetation manipulation would be treated to improve forage for deer and elk (see Map 3-2). An average of 38 acres would be treated annually.

The WSA is considered marginal habitat for sage grouse. Small, isolated populations are known to exist within the area. However, their numbers have remained essentially static for many years. Consequently, no management actions are expected that would change sage grouse habitat.

Required management stipulations for woodland harvesting are listed under Timber Resources Actions for this alternative. Required management stipulations for vegetation manipulation follow:

- The *Recommended Guidelines for the Maintenance of Sage Grouse Habitat* promulgated by the Western Association of State Game and Fish Commissioners will be followed when planning and conducting sagebrush control projects within occupied sage grouse habitat. Major points in the guidelines include consultation with the Division of Wildlife, protection of breeding complexes (and nesting areas), winter concentration areas, and design of control areas.

- Areas receiving moderate to high soil disturbance during treatment or an understory ground cover less than 10 percent will be seeded with a mixture of grass, forb, and browse species. Livestock grazing will be prohibited on all seeded areas for two growing seasons.

- New roads or trails leading to or on treatment areas normally will be physically closed following completion of the project. Activities occurring during the winter or early spring will be completed in the shortest period and number of seasons possible in critical deer and elk winter range.

### Livestock Grazing Actions

The WSA will continue to be allotted for livestock grazing at existing levels. Portions of five grazing allotments are within the WSA. These allotments have a total combined allocation of 2,067 AUMs. No additional range developments are planned within the WSA.

### Timber Resources Actions

Productive forest land, totaling 478 acres and 1.65 million board feet (MMBF), and productive woodland, totaling 1,011 acres and 13,750 cords are within the suitable portion of the WSA. No other productive forest land or woodland exist in the remaining 562 acres outside the 9,852 acre Bull Gulch Recreation Management Area but inside the area recommended suitable for wilderness. Timber harvest would be managed to stay within cumulative sedimentation rates in the 208 Plan Guidelines which could require deferment of future timber sales.

In the 4,586 acre nonsuitable portion of the WSA, productive forest land, totaling 137 acres (.65 MMBF); and productive woodland, totaling 1,048 acres (14,250 cords), would be managed and available for commercial harvesting (see Map 3-2). On a sustained yield basis, an average of 8 thousand board feet of timber on 2 acres and 300 cords



R 86 W

R 85 W

**Map 2-3  
Bull Gulch WSA  
Proposed Action**

Wilderness Study Area Boundary

Recommended Suitable

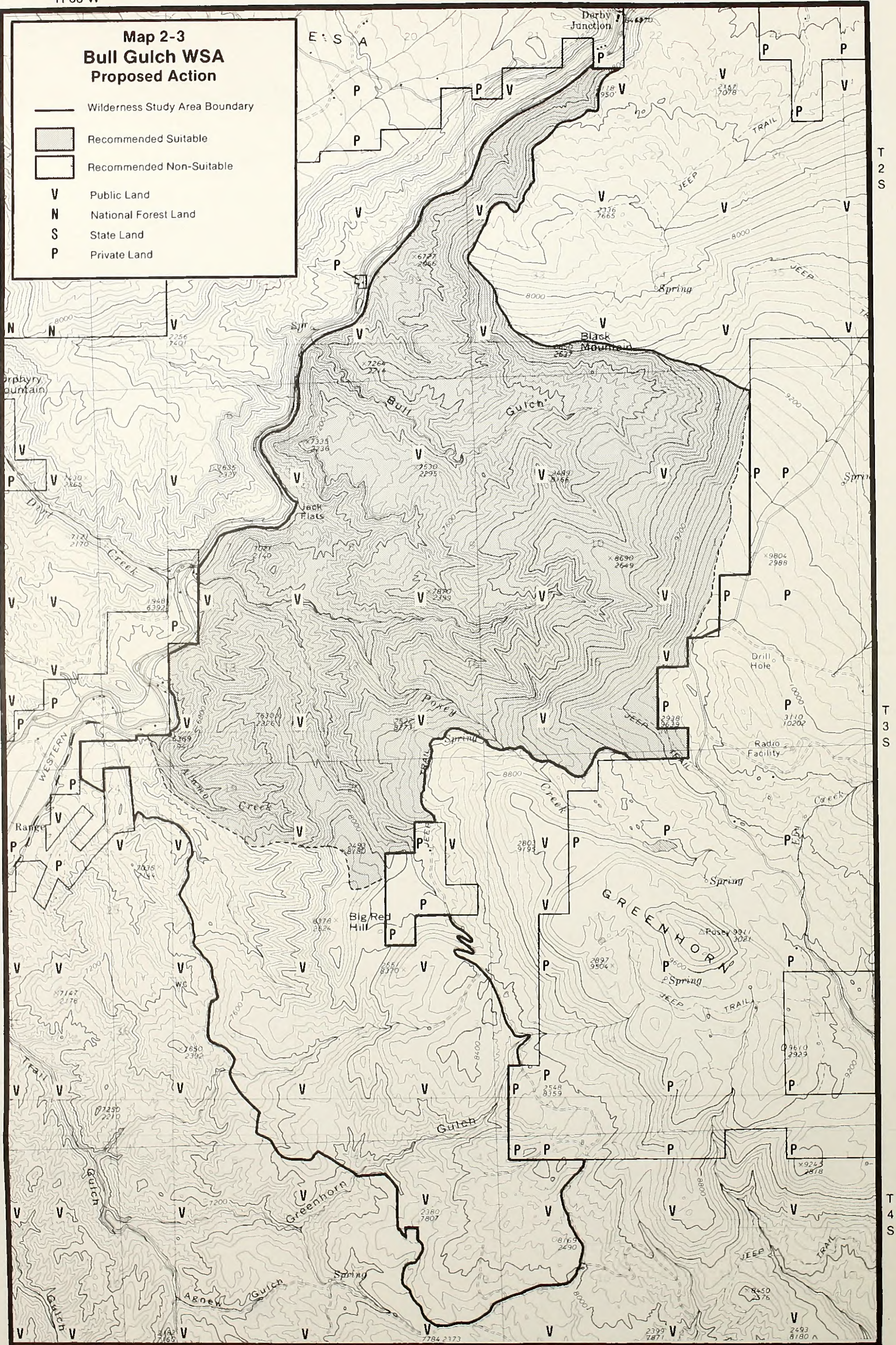
Recommended Non-Suitable

V Public Land

N National Forest Land

S State Land

P Private Land

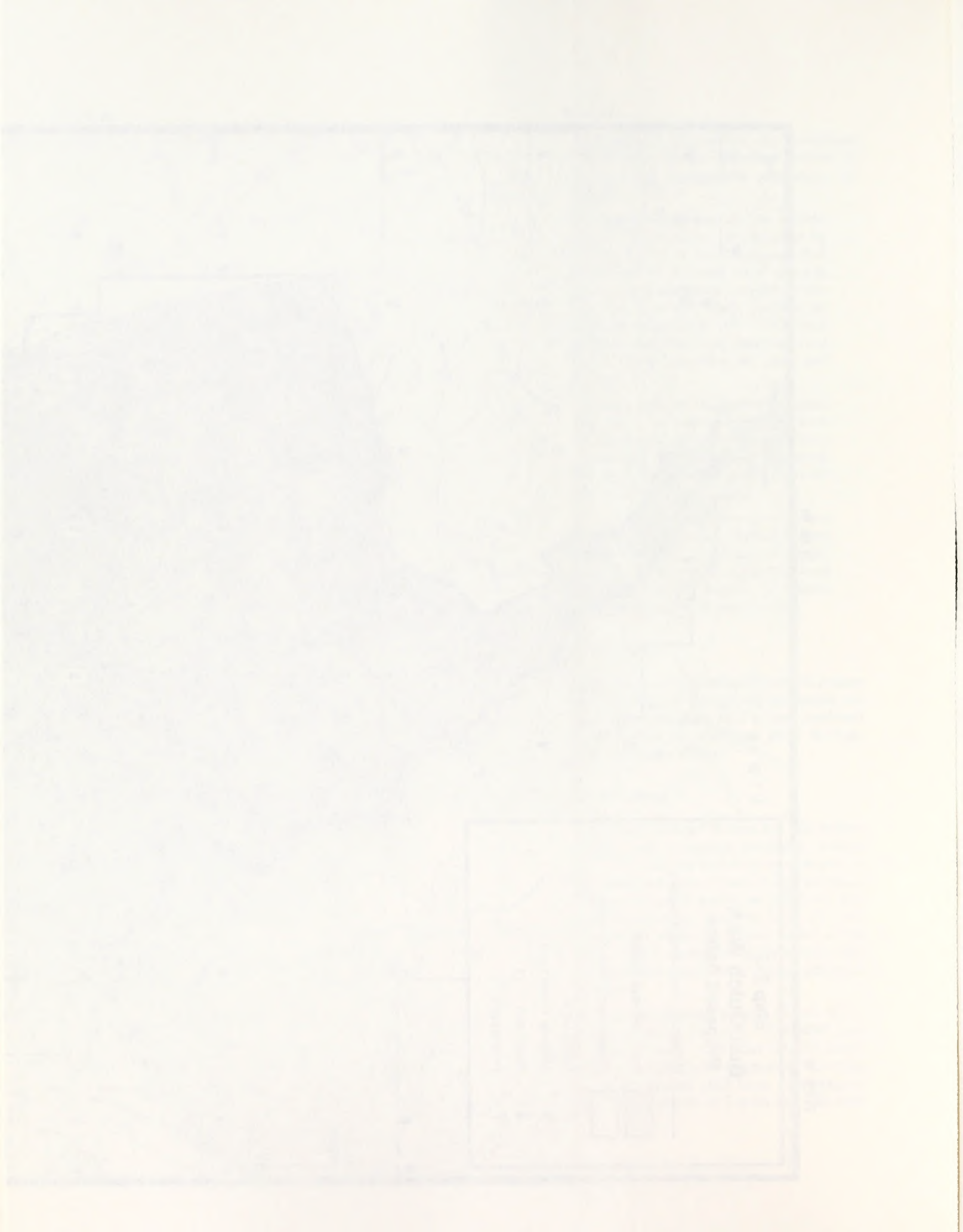


1 1/2 0 1 miles

Elevations in Feet and Meters  
Contours at 80 Foot Intervals









of fuelwood on 22 acres would be harvested annually. An average annual harvest of 8 thousand board feet of timber would not be economically feasible, and therefore it is assumed harvesting would occur in three harvests at 20 to 30 year intervals with each harvest including approximately 45 acres and 0.22 MMBF of timber. Approximately 3 to 4 miles of roads would be constructed to access 11 sale areas. Timber harvests would be managed to keep the cumulative sedimentation within 208 Guidelines.

Required management stipulations for timber management follow:

- To maintain big game populations, timber harvesting haul roads may be seasonally or permanently closed following timber harvesting.
- Roadways, landings, and other heavily-disturbed sites will be reclaimed by establishing a ground cover.
- Adequate snags for cavity-dwelling wildlife species will be left at forest edges, adjacent to aquatic and riparian areas, and near clearcut boundaries.
- Buffers will be maintained around 10 raptor nest sites located on the northwest side of the WSA. Size of buffers will be determined based on topography and design of harvest areas.
- In wooded areas, clearcuts will be restricted to 40 acres or less in size, limited in width to 400 yards, and irregular in shape to enhance edge effect. Adequate thermal and hiding cover for deer and elk will be retained in or adjacent to treatment areas.
- Forty percent of an elk summer range will be maintained in a forested type with a 75 percent tree canopy.
- Harvesting in aspen woodland will be prohibited from May 1 to July 15 unless on-site inspection reveals that fawning deer will not likely be disturbed.
- Pinyon-juniper woodland harvesting occurring in critical big game winter range will be restricted from January 16 to April 30 if determined to be detrimental to big game
- New roads or trails leading to or on treatment areas normally will be physically closed following completion of the project. Activities occurring during the winter or early spring will be completed in the shortest period and number of seasons possible in critical deer and elk winter range.

## DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

- Roads will be constructed to ensure revegetation of all cuts and fill slopes, stabilization of road surfaces and installation of culverts, ditches, water bars, and runouts to reduce potential runoff and erosion.

### Recreation Resources Actions

The Bull Gulch Recreation Management Area consisting of 9,852 acres is within the suitable portion of the WSA and is currently closed to ORV use and is managed to provide nonmotorized recreational opportunities in a natural setting (see Map 3-2). Currently, no recreation developments are planned within the entire WSA.

In addition to the 9,852 acres already closed to ORV use within the Bull Gulch Recreation Management Area, the remaining 562 acres of the suitable portion (a narrow finger on the northern border) of the WSA would be closed to ORV use. The suitable portion would be managed to provide continuing nonmotorized recreational opportunities such as hunting and hiking in a natural setting.

The entire nonsuitable portion of the WSA (4,586 acres) would continue to be open to ORV use and would be managed to provide for both nonmotorized and motorized recreational opportunities in a setting that generally appears unmodified but does contain evidence of other resource activities and uses.

Use levels throughout the WSA are expected to remain approximately the same as current levels (approximately 700 visits annually).

## ALL WILDERNESS ALTERNATIVE

The entire 15,000 acres of public land in the Bull Gulch WSA would be recommended as suitable for wilderness designation (see Map 2-3).

### Energy and Mineral Resources Actions

Wilderness designation would withdraw 14,364 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. No claims are currently located within the WSA and no exploration or development are anticipated because of the identified low potential for all minerals.

However, if any mining claims would be located within the WSA prior to designation, validity examinations would be conducted prior to approving proposed plans of operations. Plans of operations would be denied for claims



## CHAPTER 2

determined to be invalid. Plans of operations approved for valid claims would have to include provisions to ensure that:

1. Management activity will be subject to reasonable regulation to prevent impairment of wilderness characteristics.
2. If mechanical or motorized equipment, including helicopter and fixed wing aircraft (beyond casual use), will be used, there is no reasonable alternative.
3. The reclamation measures included in the plan of operations are adequate to provide for restoration as near as practicable of the surface of the land disturbed.

If the existing post-FLPMA leases on 2,789 acres (see Map 3-1) do not expire by the time of designation, development activities would be allowed subject to the stipulations attached to the leases at the time of issuance which include the standard oil and gas stipulations (see Appendix 3) that may be attached to all leases supplemented by a provision that activities can occur only if wilderness values are not impaired. No exploration or development are anticipated on these leases because of the identified low potential for all minerals.

Initially, the 636-acre area of state-owned minerals (see Map 3-1) would be open to mining and mineral leasing at the State's discretion. Currently, no leases exist within this area and no exploration or development are anticipated. If the mineral estate would be acquired, this area would also be withdrawn from all forms of appropriation and managed the same as the rest of the WSA.

### Terrestrial Wildlife Actions

Wilderness designation would provide habitat protection from resource disturbing activities including timber harvesting and vegetation manipulation. Management actions in the WSA would be custodial in nature and would be directed toward protection of crucial winter range for deer and elk. Big game wildlife habitat would be managed consistent with the Colorado Division of Wildlife's populations goals for deer and elk. The population goals for 1988 are a 22 percent increase for deer (estimated current population is 700) and a 5 percent decrease for elk (estimated current population is 175).

Since timber harvesting and vegetation manipulation would be precluded in this alternative, proposed habitat improvement projects on 1,798 acres would not occur.

### Livestock Grazing Actions

Management of livestock grazing would be the same as described under the Proposed Action.

### Timber Resources Actions

In addition to the 9,852 acres already excluded from timber management and harvesting within the Bull Gulch Recreation Management Area, the remaining 5,148 acres within the WSA would be excluded from timber management and harvesting.

### Recreation Resources Actions

In addition to the 9,852 acres already closed to ORV use within the Bull Gulch Recreation Management Area, the remaining 5,148 acres within the WSA would be closed to ORV use. Currently, no recreation developments are planned within the WSA. The WSA would be managed to provide nonmotorized recreational opportunities such as hunting and hiking in a natural setting. Of the current 700 total visits annually, approximately 200 ORV visits would be precluded in this alternative. Use levels for all other activities are expected to remain approximately the same as current levels (approximately 500 visits annually) unless additional legal access to the WSA can be acquired. Attempts would be made to acquire legal public access through private land along the eastern boundary of the WSA under all alternatives. It cannot be determined at this time whether these attempts would be successful.

## NO WILDERNESS (NO ACTION ALTERNATIVE)

The entire 15,000 acres of public land in the Bull Gulch WSA would be recommended as nonsuitable for wilderness designation (see Map 2-3).

### Energy and Mineral Resources Actions

The portion of the WSA with federally-owned minerals (14,364 acres) would be open to appropriation under the mining and mineral leasing laws. No exploration or development are anticipated because of the identified low potential for all minerals. Exploration and development of mineral resources would be allowed, however, subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities.

A "no surface facilities" stipulation would be attached to any oil and gas leases issued within the Bull Gulch Recreation Management Area or within 1/2 mile of the Colorado River to protect scenic and recreational values in the Bull Gulch Recreation Management Area and riparian



## **DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **CASTLE PEAK WILDERNESS STUDY AREA**

#### **PROPOSED ACTION (NO WILDERNESS/ NO ACTION ALTERNATIVE)**

The entire 11,940 acres of public land in the Castle Peak WSA would be recommended as nonsuitable for wilderness designation (see Map 2-4).

#### **Energy and Mineral Resources Actions**

The entire WSA (11,940 acres) would be open to appropriation under the mining and mineral leasing laws. No exploration or development are anticipated because of the identified low potential for all minerals. Exploration and development of mineral resources would be allowed, however, subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Approximately 7,660 acres would have seasonal restrictions on exploration, drilling, or other oil and gas development activities to protect elk calving areas (see Map 3-3). Activities would be prohibited between May 1 and July 1 of each year. Leases on the remaining 4,280 acres would be issued with the standard stipulations that may be used for all leases (see Appendix 2). Until its expiration, the existing post-FLPMA lease on 318 acres (see Map 3-3) would be subject only to the stipulations attached at the time of issuance which include the standard oil and gas stipulations that may be attached to all leases and supplemented by a provision that activities can occur only if wilderness values are not impaired (see Appendix 2).

#### **Aquatic Wildlife Actions**

Aquatic habitat on 2.9 miles of Castle Creek, 1.9 miles of Catamount Creek, 1.0 mile of Norman Creek, and 3 acres of Edges Lake would be improved (see Map 3-4). The habitat improvement projects include instream structures to create riffles and pools, streambank or shoreline structures to stabilize banks, reduce erosion, and plantings to provide cover.

#### **Terrestrial Wildlife Actions**

Big game wildlife habitat would be managed consistent with the Colorado Division of Wildlife's populations goals for deer and elk. The population goals for 1988 are a 22

values and floodplains along the Colorado River. This stipulation would affect 9,894 acres within the WSA (see Map 3-1). An additional 950 acres would have seasonal restrictions on exploration, drilling, or other oil and gas development activity to protect important seasonal wildlife habitat. Activities would be prohibited between January 15 and April 30 of each year on approximately 350 acres and between March 20 and May 20 of each year on approximately 600 acres (see Map 3-1).

Leases on the remaining 3,429 acres of the nonsuitable portion would be issued with the standard stipulations used for all leases. Until their expiration, existing post-FLPMA leases on 2,789 acres (see Map 3-1) would be subject only to the stipulations attached at the time of issuance which include the standard oil and gas stipulations that may be attached to all leases supplemented by a provision that activities can occur only if wilderness values are not impaired (see Appendix 2).

The 636-acre area of state-owned minerals would be open to mining and mineral leasing at the State's discretion. Currently, no leases exist within this area and no development is anticipated.

#### **Terrestrial Wildlife Actions**

Big game habitat management, including proposed habitat improvement projects, would be the same as described under the Proposed Action.

#### **Livestock Grazing Actions**

Livestock grazing management would be the same as described under the Proposed Action.

#### **Timber Resources Actions**

Timber resources management, for both productive forest land and productive woodlands, would be the same as described under the Proposed Action.

#### **Recreation Resources Actions**

Recreation management would be essentially the same as described under the Proposed Action. The only difference is that 562 acres closed to ORV use under the Proposed Action would continue to be open to ORV use. However, the topography of this area is unsuitable for ORV use and no use is presently occurring nor anticipated.

A summary of environmental impacts for Bull Gulch WSA is shown in Table 2-3.



Table 2-3.

## BULL GULCH WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses]	Proposed Action (Partial Wilderness Alternative)	All Wilderness Alternative	No Wilderness/ No Action Alternative
Big Game Habitat and Populations	10,621 acres recommended suitable would be protected from habitat disruption by mineral exploration and development. No exploration or development would be anticipated. Projected population of 850 deer and 160 elk would be maintained. Habitat improvements on 1,798 acres would increase wildlife forage by 1,275 AUMs and improve critical winter range conditions.	Wilderness designation of the entire WSA would prevent habitat disruption on 15,000 acres. Projected populations of 850 deer and 160 elk would still be maintained although the forage quality and browse condition for these animals would not be improved.	Same as Proposed Action.
Timber Production	The annual average sustained yield would be 8 thousand board feet of timber (2 acres and 300 cords of fuelwood (22 acres).	Wilderness designation of the entire WSA (15,000 acres) would remove 137 acres of productive forest land (.65 MMBF of timber) and 1,048 acres of productive woodland (14,250 cords of fuelwood) from the current allowable harvest base. This would result in a loss of 8 thousand board feet of timber (2 acres) and 300 cords of fuelwood (22 acres) annually.	Same as Proposed Action.



Table 2-3. (continued)

## BULL GULCH WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses]	Proposed Action (Partial Wilderness Alternative)	All Wilderness Alternative	No Wilderness/ No Action Alternative
Erosion and Sedimentation	Designation would prevent increases in erosion and sedimentation in the suitable portion of the WSA (10,414 acres). In the non-suitable portion, timber harvesting and vegetation manipulation on an average of 62 acres disturbed per year would cause short-term increases in erosion and sedimentation rates of up to 200 tons per year. In the long term, rates would decline to, or below, existing levels.	Erosion and sedimentation would remain at or near current levels.	Same as those described for the non-suitable portion in the Proposed Action. This is because timber harvesting and vegetation manipulation, the only activities that would affect erosion and sedimentation rates, are located in that part of the WSA described as the non-suitable portion in the Proposed Action.
Energy and Mineral Development	There would be no mineral development in the WSA because of the low potential for all minerals. Exploration and leasing could be allowed on 3,429 acres in the non-suitable portion and on 636 acres of state owned minerals in the suitable portion. An additional 1,157 acres in the non-suitable portion would be available for leasing subject to no surface occupancy or seasonal stipulations.	No significant impacts because of the low potential for all minerals. Exploration and development of potential energy and mineral resources prohibited on 14,364 acres subject to valid existing rights. No valid rights are anticipated.	Potential energy and mineral resources would be available for development. No exploration or development are anticipated because of the low development potential for all minerals including oil and gas.



Table 2-3. (continued)  
BULL GULCH WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses]	Proposed Action (Partial Wilderness Alternative)	All Wilderness Alternative	No Wilderness/ No Action Alternative
Recreational opportunities and Use	Wilderness designation would maintain recreational opportunities or settings in the suitable portion of the WSA (10,414 acres). All recreational opportunities including ORV use would continue to be available in the nonsuitable portion (4,586 acres). Use levels in the WSA totaling about 700 visits annually are expected to remain at current levels.	Recreation settings and non-motorized uses would be maintained. An additional 5,148 acres would be closed to ORV use, resulting in a loss of 200 ORV visits annually within the WSA. The impacts of shifting this use to other public lands would be negligible. Use levels for all other activities, totalling about 500 visits annually, are expected to remain at current levels.	Same as Proposed Action.
Wilderness Values	Wilderness designation would provide long-term statutory protection. Preservation of all wilderness values would be assured on 9,778 acres and is anticipated on the remaining 636 acres of the suitable portion because development of state-owned minerals is not expected to occur. Timber harvesting and vegetation manipulation would cause loss of naturalness on 1,798 acres in the unsuitable portion over the long term. Timber harvesting, vegetation manipulation, and continued ORV use would cause localized reductions of opportunities for primitive recreation and solitude on 4,586 acres.	Wilderness values on 15,000 acres would receive long-term statutory protection. Preservation of all wilderness values would be assured on 14,364 acres and anticipated on 636 acres because development of state-owned minerals expected.	Wilderness values would not receive statutory protection. However, no short term loss of wilderness values is expected on 10,414 acres because of existing restrictive management (e.g., mineral leasing restrictions, ORV closure) and lack of development potential. Timber harvesting, vegetation manipulation, and continued ORV use would cause localized reductions of opportunities for primitive recreation and solitude on a total of 4,586 acres.



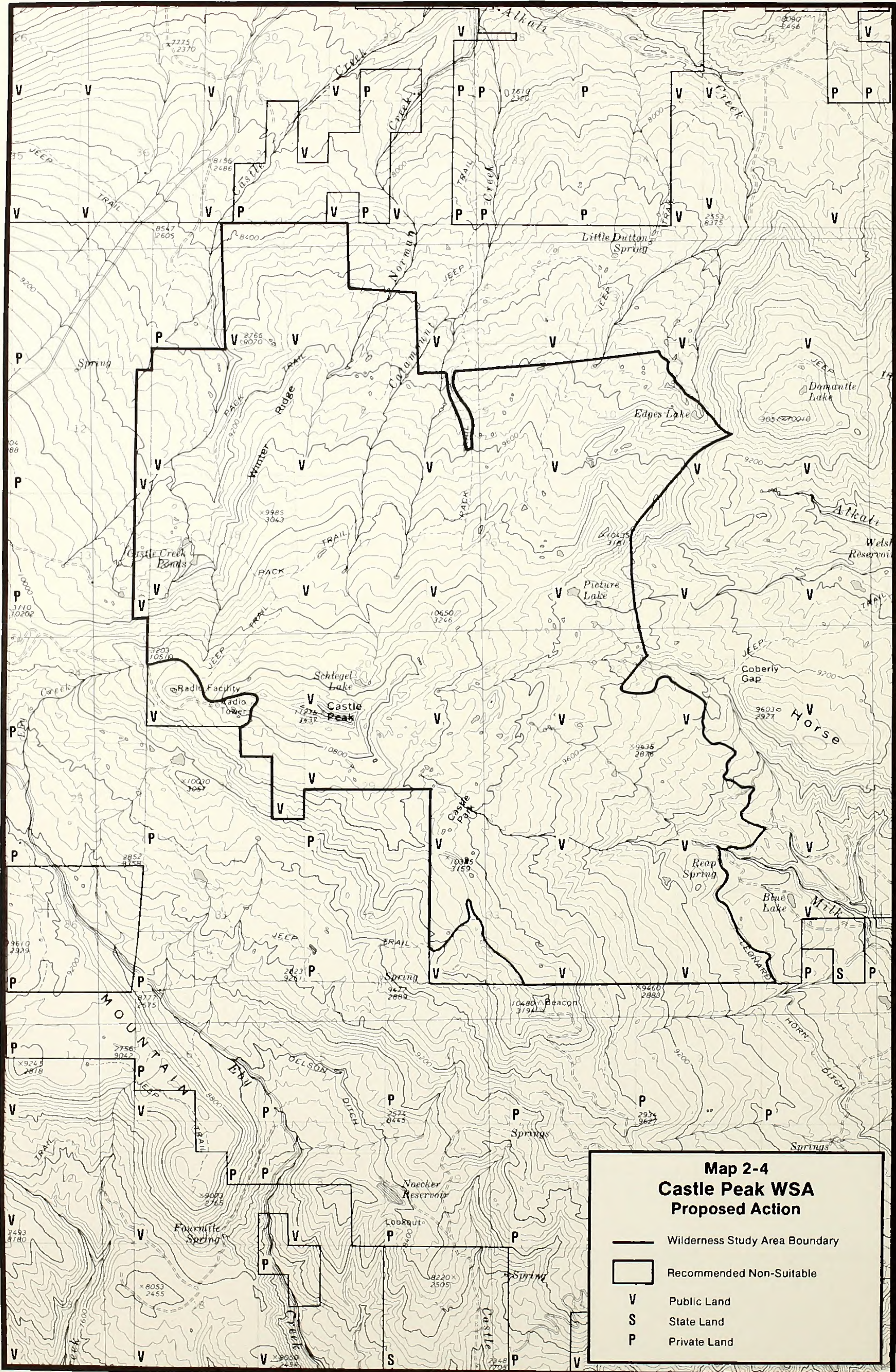
R 85 W

R 84 W

T 2 S

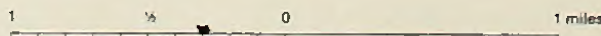
T 3 S

T 4 S



**Map 2-4  
Castle Peak WSA  
Proposed Action**

- Wilderness Study Area Boundary
- Recommended Non-Suitable
- V Public Land
- S State Land
- P Private Land



Elevations in Feet and Meters  
Contours at 80 Foot Intervals







## DESCRIPTION OF THE ALTERNATIVES INCLUDING THE PROPOSED ACTION

percent increase for deer (estimated current population is 1,000) and a 5 percent decrease for elk (estimated current population is 400). No habitat improvement projects are planned within the WSA. Other than the seasonal mineral leasing restrictions identified under Energy and Minerals Resources Actions for this alternative, management would be custodial in nature and directed toward protection of elk calving and deer fawning areas.

### Livestock Grazing Actions

The entire WSA (11,940 acres) will continue to be allotted for livestock grazing at existing levels. Portions of six grazing allotments are within the WSA. These allotments have a total combined allocation of 3,794 AUMs. Currently, no additional range improvements are planned within the WSA.

### Timber Resources Actions

Productive forest land within the WSA, totaling 9,450 acres and 59 MMBF, would be managed and available for commercial harvesting (see Map 3-4). On a sustained yield basis, an average of 0.66 MMBF of timber on 105 acres would be harvested annually. Approximately 5 to 10 miles of roads would be constructed to access all sale areas. It is estimated that approximately 2 miles of these roads would remain open for recreational use. Timber harvests would be managed to keep the cumulative sedimentation within the 208 Guidelines.

Required management stipulations for timber management follow:

- Surface-disturbing activities will be restricted in or near riparian areas. The size of the restricted area will be determined based on topography and design of harvest areas.
- Equipment will not be allowed to move up or down stream channels. Heavy equipment will cross streams only at designated or constructed crossings with culverts and bridges designed to allow upstream migration of fish.
- Timber harvesting haul roads will be seasonally or permanently closed following timber harvesting if monitoring determines that disturbance to big game becomes excessive.
- Roadways, landings, and other heavily-disturbed sites will be reclaimed by establishing a ground cover.
- Adequate snags for cavity-dwelling wildlife species will be left at forest edges, adjacent to aquatic and riparian areas, and near clearcut boundaries.

- In wooded areas, clearcuts will be restricted to 40 acres or less in size, limited in width to 400 yards, and irregular in shape to enhance edge effect. Adequate thermal and hiding cover for deer and elk will be retained in or adjacent to treatment areas.

- Forty percent of an elk summer range will be maintained in a forested type with a 75 percent tree canopy.

- Conifer and aspen harvesting will be prohibited in elk calving areas, and a buffer zone will be provided around these areas. The size of the buffer zone will be determined based on topography and design of harvest areas. Within the buffer zone, timber harvesting will be prohibited between May 1 and June 15.

- Harvesting in aspen woodland will be prohibited from May 1 to July 15 unless on-site inspection reveals that fawning deer will not likely be disturbed.

- New roads or trails leading to or on treatment areas normally will be physically closed following completion of the project. Activities occurring during the winter or early spring will be completed in the shortest period and number of seasons possible.

- Roads will be constructed to ensure revegetation of all cuts and fill slopes, stabilization of road surfaces and installation of culverts, ditches, water bars, and runouts to reduce potential runoff and erosion.

### Recreation Resource Actions

ORV use in the entire WSA (11,940 acres) would continue to be limited to designated routes except for snowmobiles operating on snow. Currently, ORV use in the WSA, except for snowmobiles, is only allowed on specific routes totalling 4.5 miles (see Map 3-4). The entire WSA would continue to be managed to provide for both nonmotorized and motorized recreational opportunities in a setting that generally appears unmodified but does contain evidence of other resource activities and uses. No recreation developments are planned within the WSA whether or not the area is designated wilderness. Use levels are expected to remain approximately the same as current levels (approximately 2,050 visits annually).



## CHAPTER 2

### ALL WILDERNESS ALTERNATIVE

The entire 11,940 acres of public land in the Castle Peak WSA would be recommended as suitable for wilderness designation (see Map 2-4).

#### Energy and Mineral Resources Actions

Wilderness designation would withdraw 11,940 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. No claims are currently located within the WSA and no exploration or development are anticipated because of the identified low potential for all minerals.

However, if any mining claims would be located within the WSA prior to designation, validity examinations would be conducted prior to approving proposed plans of operations. Plans of operations would be denied for claims determined to be invalid. Plans of operations approved for valid claims would have to include provisions to ensure that:

1. Management activity will be subject to reasonable regulation to prevent impairment of wilderness characteristics.
2. If mechanical or motorized equipment, including helicopter and fixed wing aircraft (beyond casual use), will be used, there is no reasonable alternative.
3. The reclamation measures included in the plan of operations are adequate to provide for restoration as near as practicable of the surface of the land disturbed.

Development activities on the existing 318 acre oil and gas lease (see Map 3-1) would be allowed if the lease has not expired by the time of designation and subject to the stipulations attached to the lease at the time of issuance which include the standard oil and gas stipulations that may be attached to all leases supplemented by a provision that activities can occur only if wilderness values are not impaired (see Appendix 2). No exploration or development are anticipated on the lease because of the identified low potential for all minerals.

#### Aquatic Wildlife Actions

Aquatic habitat on 2.9 miles of Castle Creek, 1.9 miles of Catamount Creek, 1.0 mile of Norman Creek, and 3 acres of Edges Lake could be improved as in the Proposed Action if proposed projects would be determined to be consistent with wilderness management. It is assumed for the purpose of analysis that the same projects could be allowed as in the Proposed Action except they would be accomplished without mechanized equipment. The projects

listed in the Proposed Action would all be accomplished with mechanized equipment.

#### Terrestrial Habitat Actions

Big game habitat management would be essentially the same as described under the Proposed Action. The only difference is that the seasonal mineral leasing restrictions to protect deer and elk habitat would not be necessary because mineral leasing and timber harvesting would not occur under this alternative.

#### Livestock Grazing Actions

Livestock grazing management would be the same as described under the Proposed Action. Portions of six grazing allotments (3,794 AUMs) will continue to be grazed at existing levels. No range projects are planned.

#### Timber Resources Actions

Timber management on 9,450 acres of productive forest land and harvesting of 59 MMBF would not be allowed within the WSA (11,940 acres).

#### Recreation Resources Actions

The entire WSA (11,940 acres) would be closed to ORV use. Currently, no recreation developments are planned in the WSA. The WSA would be managed to provide nonmotorized recreational opportunities such as hunting and hiking in a natural setting. Except for ORV use of 150 visits annually which would be precluded in this alternative, use levels are expected to remain approximately the same as current levels (approximately 1,900 visits annually). Attempts would be made to acquire legal public access through private land along the northern and western boundaries of the WSA under all alternatives.

A summary of environmental impacts for Castle Peak WSA is shown in Table 2-4.



Table 2-4.  
CASTLE PEAK WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses	Proposed Action (No Wilderness/ No Action Alternative)	All Wilderness Alternative
Erosion and Sedimentation	Timber harvesting and road construction on an average 135 acres disturbed per year would cause short-term increases in erosion and sedimentation rates of up to 460 tons per year, but is not expected to exceed the threshold levels given in the 208 Plan. In the long-term, rates would return to or below pre-existing levels.	Increases in erosion and sedimentation because timber harvesting would be precluded.
Energy and Mineral Exploration and Development	No exploration or development or development are anticipated because of the low potential for all minerals including oil and gas.	Exploration and development of mineral resources would be prohibited on 11,940 acres subject to valid existing rights, although there is low mineral potential. No valid rights are anticipated.
Aquatic Habitat and Populations	Impacts from timber harvesting over the long term would cause major but short-lived impacts on fisheries. Once disturbances are stabilized and stream sedimentation reduced, the aquatic habitat would rapidly improve. Aquatic habitat improvement project would increase sediment levels. However, over the long term (1-5 years), habitat improvements on 5.8 miles of streams and one lake (3 acres) would improve aquatic habitat conditions and increase fish productivity.	Over the long term (1-5 years) habitat improvement on 5.8 miles of streams and one lake (3 acres) would improve aquatic habitat conditions and increase fish productivity. Aquatic habitat quality could be reduced from habitat improvement projects in the short term through increased sediment levels.
Big Game Habitat and Populations	Projected populations of 1,225 deer and 375 elk would be maintained. In the long term, timber harvesting would cause minor temporary habitat disruption and displacement of big game to other portions of the WSA.	Projected populations of 1,225 deer and 375 elk would be maintained. Habitat disruption and displacement of big game associated with timber harvesting would not occur.



Table 2-4. (continued)

## CASTLE PEAK WSA—SUMMARY OF IMPACTS BY ALTERNATIVE

Resource Values/Uses	Proposed Action (No Wilderness/ No Action Alternative)	All Wilderness Alternative
Timber Production	Timber production would be allowed on forest land in the current allowable harvest base. The annual sustained yield would be 0.66 MMBF of timber.	Wilderness designation would remove 9,450 acres of productive forest land from the allowable harvest base. 59 MMBF of productive timber with an annual sustained yield of 0.66 MMBF would be foregone. While these figures appear significant for the resource area, they become very insignificant when compared to the annual allowable harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.
Recreational Opportunities and Use	Recreation settings and uses would be maintained in the WSA. Use levels, totaling about 2,050 visits per year, are expected to remain at current levels. Localized displacement of non-motorized primitive recreation (about 25 visits annually) would occur.	The existing recreational setting and non-motorized uses would be maintained. The entire WSA would be closed to ORV use, resulting in a loss of 150 ORV visits annually within the WSA. The impacts of shifting this use to other public lands would be negligible. Non-motorized activities, totalling about 1,900 visits annually, are expected to remain at current levels.
Wilderness Values	The overall effect would be the loss of wilderness characteristics throughout the WSA because of the wide-spread distribution of impacts from timber harvesting.	All wilderness values on 11,940 acres would receive long-term statutory protection.



## CHAPTER 3 AFFECTED ENVIRONMENT

### CHAPTER THREE AFFECTED ENVIRONMENT







# CHAPTER 3

## AFFECTED ENVIRONMENT

This chapter describes the environment of the areas that would be affected by the alternatives identified in Chapter 2. The descriptions for each WSA include only those resource values or uses selected for detailed analysis in the scoping process (see Chapter 1 and Table 1-3).

### EAGLE MOUNTAIN WILDERNESS STUDY AREA (CO-070-392)

#### Setting

Eagle Mountain WSA is located eight miles west of Aspen and is contiguous to the 161,540 acre Maroon Bells-Snowmass Wilderness. The WSA contains 330 acres of steep, mountainous topography with elevations ranging from 8,280 feet along the eastern boundary to 9,937 feet at the summit of Eagle Mountain. Topographically, the WSA is a natural extension of the Wilderness Area (see Map 2-1).

#### Energy and Mineral Resources

Mineral surveys conducted within the WSA by the USGS and USBM revealed no identified mineral resources and a low potential for undiscovered mineral resources including base and precious metals, oil, gas, and uranium. No mines, prospects, or mineralized areas were identified within the WSA during the investigations. The surveys identified sand, gravel, and industrial rock resources within the WSA, but determined sufficient quantities are available elsewhere to satisfy current local needs (*Soulliere 1986a*).

No mineral leases are within the WSA. BLM records indicate 21 unpatented lode claims and two unpatented mill site claims located completely or partially within the WSA.

These claims encompass virtually all of the WSA. Five of the lode claims and one mill site claim date from 1939.

#### Wilderness Values

##### Mandatory Wilderness Characteristics

*Size.* The WSA contains 330 acres of public land administered by the BLM. No private or state lands are within the boundaries of the WSA. The WSA was studied under Section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA) as a potential addition to the contiguous USFS Maroon Bells-Snowmass Wilderness because the WSA is less than 5,000 acres in size.

*Naturalness.* The only imprint of man which exists within the WSA is a small aspen rail corral located in a dense aspen stand.

Panoramic views from the WSA are available of the adjacent wilderness and National Forest lands to the south and west. To the north and east, there are views of pastoral landscapes and the Snowmass Ski Area. Although areas of vegetative manipulation and other activities of man outside the WSA are visible, they have a very insignificant effect on the qualities of naturalness of the WSA.

*Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation.* The WSA by itself does not possess outstanding opportunities for solitude due to its topography and small size (330 acres). Opportunities for sightseeing, photography, hiking, and hunting are available, but are not considered outstanding. However, the WSA is a natural extension of the 161,540 acre Maroon Bells-Snowmass Wilderness (no physical barriers separate them) and thus, shares the wilderness area's outstanding opportunities for solitude and primitive recreation. Outside sights and sounds of man's activities have a negligible influence on these opportunities.



## CHAPTER 3

### Special Features

The WSA is rated as having high quality scenery (Class A) in the BLM's visual resource management analysis. Other than being contiguous to an existing wilderness, no other supplemental values exist.

## HACK LAKE WILDERNESS STUDY AREA (CO-070-425)

### Setting

Hack Lake WSA which is only 10 acres in size is located 20 miles northeast of Glenwood Springs contiguous to the 196,165 acre Flat Tops Wilderness. Topographically, the WSA is a natural extension of the wilderness area (see Map 2-2). It is divided into two flat-topped ridges that are extensions of the Flat Tops, a large flat top mountain. The elevation of the WSA is approximately 11,000 feet.

### Energy and Mineral Resources

Mineral surveys conducted within the WSA by the USGS and USBM revealed no identified mineral resources and a low potential for undiscovered mineral resources including oil, gas, coal, or uranium. No mines, prospects, or mineralized areas have been identified within the WSA (*Soulliere 1985*).

No mineral leases are within the WSA and BLM records indicate no mining claims are located within the WSA.

The WSA is open to mineral leasing but closed to oil and gas surface facilities (no surface occupancy stipulation, see Appendix 2).

### Wilderness Values

#### Mandatory Wilderness Characteristics

*Size.* The WSA contains 10 acres of public land administered by the BLM and consists of two separate parcels, each about 5 acres in size. No private or state lands are within the boundaries of the WSA. The WSA was studied under Section 202 of the Federal Land Policy and Management Act of 1976 (FLPMA) as a potential addition to the contiguous USFS Flat Tops Wilderness because the WSA is less than 5,000 acres in size.

*Naturalness.* The WSA is completely natural and no imprints of man are present. Sights and sounds outside the WSA are limited to recreational and agricultural influences in the Sweetwater Creek drainage. Because of distance, topographical isolation, and their limited and rural nature, these influences have no effect on the quality of naturalness within the WSA.

*Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation.* Because of its extremely small size, the WSA does not possess outstanding opportunities for solitude by itself. The panoramic views from the rim of the Flat Tops are the only primitive and unconfined recreational activity that is outstanding when considering the WSA by itself. However, the WSA is an extension of the 196,165 acre Flat Tops Wilderness and shares the outstanding opportunities for solitude and primitive recreation that are present in the existing wilderness. Outside signs and sounds of man's activities have no influence on these opportunities.

### Special Features

The WSA is rated as high quality scenery (Class A). No other supplemental values, other than being contiguous to an existing wilderness, have been identified.



# BULL GULCH WILDERNESS STUDY AREA (CO-070-430)

## Setting

The Bull Gulch WSA which contains 15,000 acres, is located south of Burns along the Colorado River. The WSA is characterized by steep, rugged, mountainous topography with deeply incised gulches and canyons. Elevations range from 6,400 feet along the Colorado River, the western boundary, to 10,020 feet along the eastern boundary.

## Soils

The majority of the WSA, mainly along the Colorado River and the central portion primarily north of Alamo Creek, consists of the Cushool-RentsacOrthents-Rock Outcrop soil association. These soils are shallow to moderately deep and well to excessively drained. The erosion condition class for this association is moderate to high (5 to 8 tons per year). The erosion condition class represents an average of the existing erosion rate for a geographic area. The existing erosion rate for a particular site may be greater or lesser than the average depending on specific site conditions including slope and vegetative cover. The southeastern portion of the WSA consists of the Dollard-Pinelli-Unnamed Rock Outcrop-Shale soil association which is shallow to deep and well drained. The remainder of the WSA consists of the Tridell-Browsto-Forrelle soil association which is deep and well to excessively drained. The erosion condition class for the two latter soil associations is moderate (5 tons per acre per year).

The sediment yield condition class for the entire WSA is moderate (0.56 to 1.40 tons per acre per year). The entire WSA is in the Colorado River watershed. The portion of the watershed east of the Colorado River that drains directly into the Colorado River encompasses approximately 75,300 acres and has an average existing annual sediment yield of 1.25 tons per acre per year.

## Energy and Mineral Resources

The mineral surveys conducted by the USGS and USBM (*Soulliere 1986b*) within the portion of the WSA recommended as suitable and the mineral assessment conducted by the BLM (*BLM 1986a*) within the portion of the WSA recommended as nonsuitable (see Map 2-3) revealed no identified mineral resources and a low potential for undiscovered mineral and energy resources including base and precious metals, oil, gas, coal, uranium, or geothermal resources. Although the southern one-third of the WSA has a moderate potential for undiscovered gypsum and anhydrite, the future exploration and/or development potential for these minerals is considered low as large tonnages of these minerals exist in deposits elsewhere which are more readily extracted, of better grade, and closer to existing markets (*BLM 1986a*).

No mines or prospects were identified within the WSA during the investigations. The surveys identified sand, gravel, and industrial rock resources within the WSA, but determined sufficient quantities are available elsewhere to satisfy current local needs. There is no record of production of mineral resources within or near the WSA. No development has occurred on a block of patented mining claims in Section 24, T. 3 S., R. 86 W., that form part of the western boundary.\* Geophysical exploration has occurred in the general area and a well was drilled on private land east of the WSA but was nonproductive. During the preparation of the DEIS, almost all of the WSA was leased for oil and gas, however, most of these leases were allowed to expire without development.

No mining claims are located within the WSA. Approximately 2,789 acres in the southern portion of the WSA are currently leased for oil and gas (see Map 3-1). These leases were issued with the stipulation that development can occur only if activities do not impair wilderness values (see Appendix 2).

The mineral estate on approximately 636 acres of the WSA is owned by the State of Colorado (see Map 3-1). The State Board of Land Commissioners has the authority for issuing leases or other mineral-related actions for this property. Currently, no leases exist.

Approximately 9,894 acres of the WSA encompassing the Bull Gulch Recreation Management Area and the remainder of the western portion of the WSA within one-half mile of the Colorado River are open to mineral leasing but is closed to oil and gas surface facilities (no surface occupancy stipulation, see Appendix 2) to protect scenic, wildlife, and recreational values in the Bull Gulch Recreation Management Area and riparian values and floodplains adjacent to the Colorado River. Approximately 950 acres of the WSA have seasonal restrictions on exploration,



## CHAPTER 3

drilling, or other oil and gas development activity to protect important seasonal wildlife habitat. Activities are prohibited between January 15 and April 30 of each year on approximately 350 acres and between March 20 and May 20 of each year on approximately 600 acres (see Map 3-1). Any future leases issued within this area will be subject to these restrictions.

### Terrestrial Wildlife - Big Game

Deer and elk are present in the WSA year-round, but the greatest concentrations occur during the winter. The estimated populations wintering in the WSA are 700 deer and 175 elk. The Colorado Division of Wildlife's population goals for the general area are a 22 percent increase for deer and a 5 percent decrease for elk by 1988. Approximately 11,900 acres, generally that portion of the WSA below 8,000 feet in elevation, is winter range for both species. All of the winter range in and near the WSA is classified as crucial habitat because deer and elk are confined here during periods of heaviest snow cover. Maintenance of this habitat is crucial to maintaining existing and projected populations and loss of any winter range would be detrimental to the herds.

That portion of the WSA generally below 7,500 feet in elevation, approximately 4,950 acres, is considered to be severe winter range (that part of the range where 90 percent of the animals are located when the annual snowpack is at its maximum in the two worst winters out of ten). Sufficient forage exists to support existing and projected populations; however, forage quality and browse condition need significant improvement, especially in the transitional zones at higher elevations to alleviate early movement to the lower winter ranges. Areas identified as suitable for habitat improvement projects are in productive woodlands following harvesting or in the 1,079 acres of sagebrush areas identified as suitable for vegetation manipulation (see Map 3-2).

### Timber Resources

Productive forest lands mainly occur along the eastern boundary of the WSA and include Douglas-fir, aspen, Engelmann spruce, and subalpine fir. In addition, the western side of Black Mountain contains ponderosa pine. Productive forest lands total 615 acres within the WSA with a total volume of 2.3 MMBF. However, because of management decisions in the RMP, productive forest lands within the Bull Gulch Recreation Management Area, totaling 478 acres and 1.65 MMBF, are excluded from management and

harvesting. The remaining 137 acres with a volume of .65 MMBF are suitable for management and harvesting (see Map 3-2).

Productive woodlands occur in the southern and southwestern portions of the WSA and total 2,059 acres with a total volume of 28,000 cords. However, because of management decisions in the RMP, productive woodlands within the Bull Gulch Recreation Management Area, totaling 1,011 acres and 13,750 cords, are excluded from management and harvesting. The remaining 1,048 acres with a volume of 14,250 cords are suitable for management and harvesting (see Map 3-2) and represent about 8 percent of the suitable woodland acreage in the Glenwood Springs Resource Area.

On a sustained yield basis, an average of 2 acres with a volume of 8 thousand board feet (MBF) of timber and 22 acres with a volume of 300 cords of fuelwood could be harvested annually. However, because an average annual harvest of eight MBF of timber would not be economically feasible, it is assumed harvesting would occur in three harvests at 20 to 30 year intervals with each harvest including approximately 45 acres and 0.22 MMBF of timber.

### Recreation Opportunities and Use





No complete recreation use data for the WSA is available. Annual visitor use estimates are approximately 100 camping and hiking visits, 200 off-road vehicle visits, and 400 big game hunting visits. Approximately 4,300 floatboating visits and 725 fishing visits occur between Catamount Bridge and Twin Bridges, the segment of the Colorado River that borders the WSA. Although the river is not within the WSA, public land within the WSA is used by floatboaters for camping and picnicking. Approximately 93 percent of the floatboating use is through commercial outfitters.

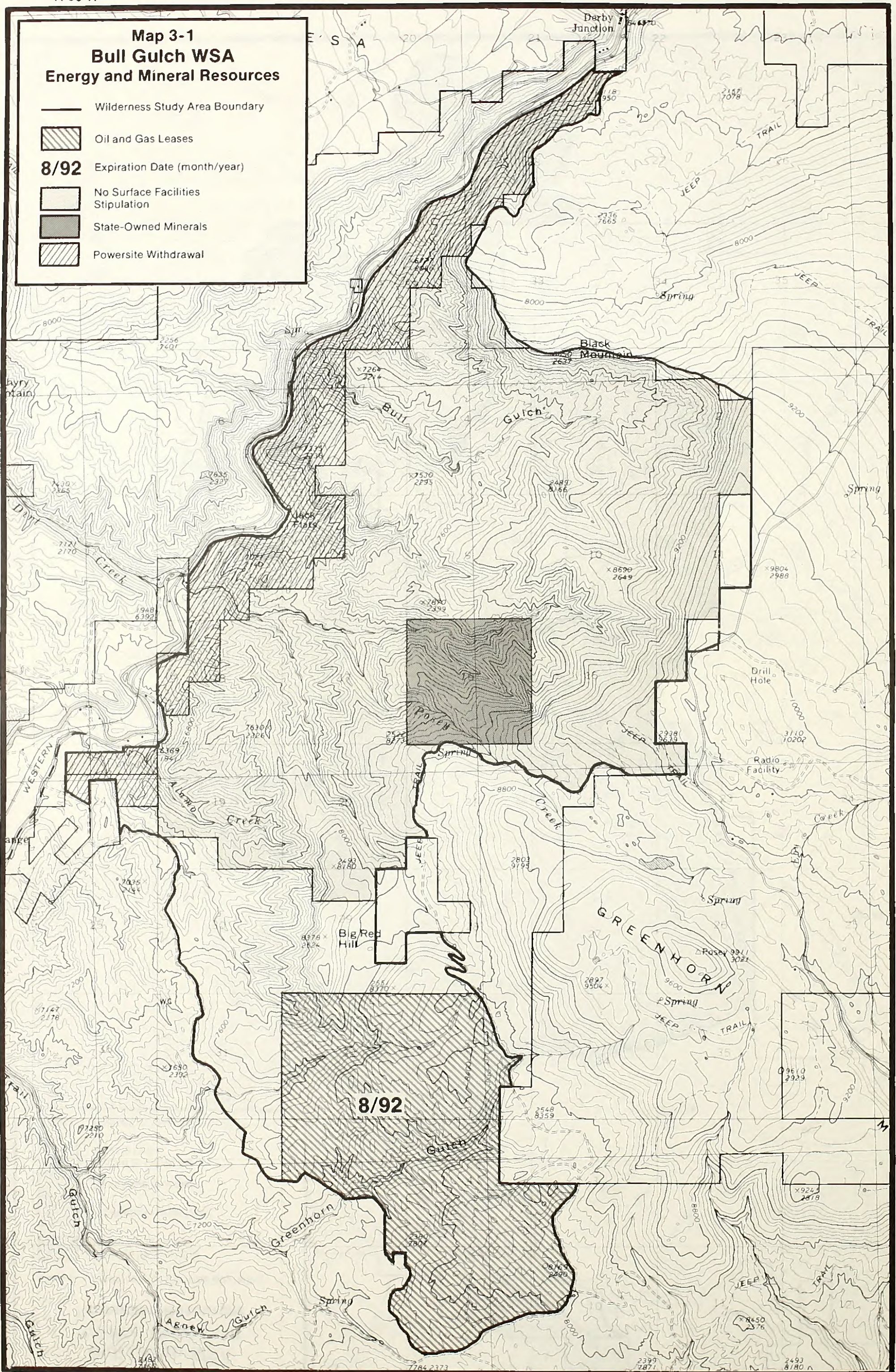
Approximately 9,852 acres within the WSA have been identified as part of the Bull Gulch Recreation Management Area. This area is closed to all off-road vehicle (ORV) use (see Map 3-2) and is managed to provide opportunities for nonmotorized recreation in a natural setting. This recreation management area contains several identified recreation features and attractions including the high quality scenery of the cliffs between Bull Gulch and Black Mountain and the unusual spires and pinnacles near Jack Flats, raptor viewing opportunities, the diversity of environments, and a relict community of ponderosa pine.

The remaining 5,148 acres of the WSA are open to ORV use, although no known use is occurring in the extreme northern portion of the WSA because of unsuitable topography. This area is managed to provide both motorized



**Map 3-1**  
**Bull Gulch WSA**  
**Energy and Mineral Resources**

- Wilderness Study Area Boundary
-  Oil and Gas Leases
- 8/92** Expiration Date (month/year)
-  No Surface Facilities Stipulation
-  State-Owned Minerals
-  Powersite Withdrawal



1 1/4 0 1 miles

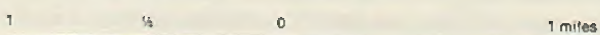
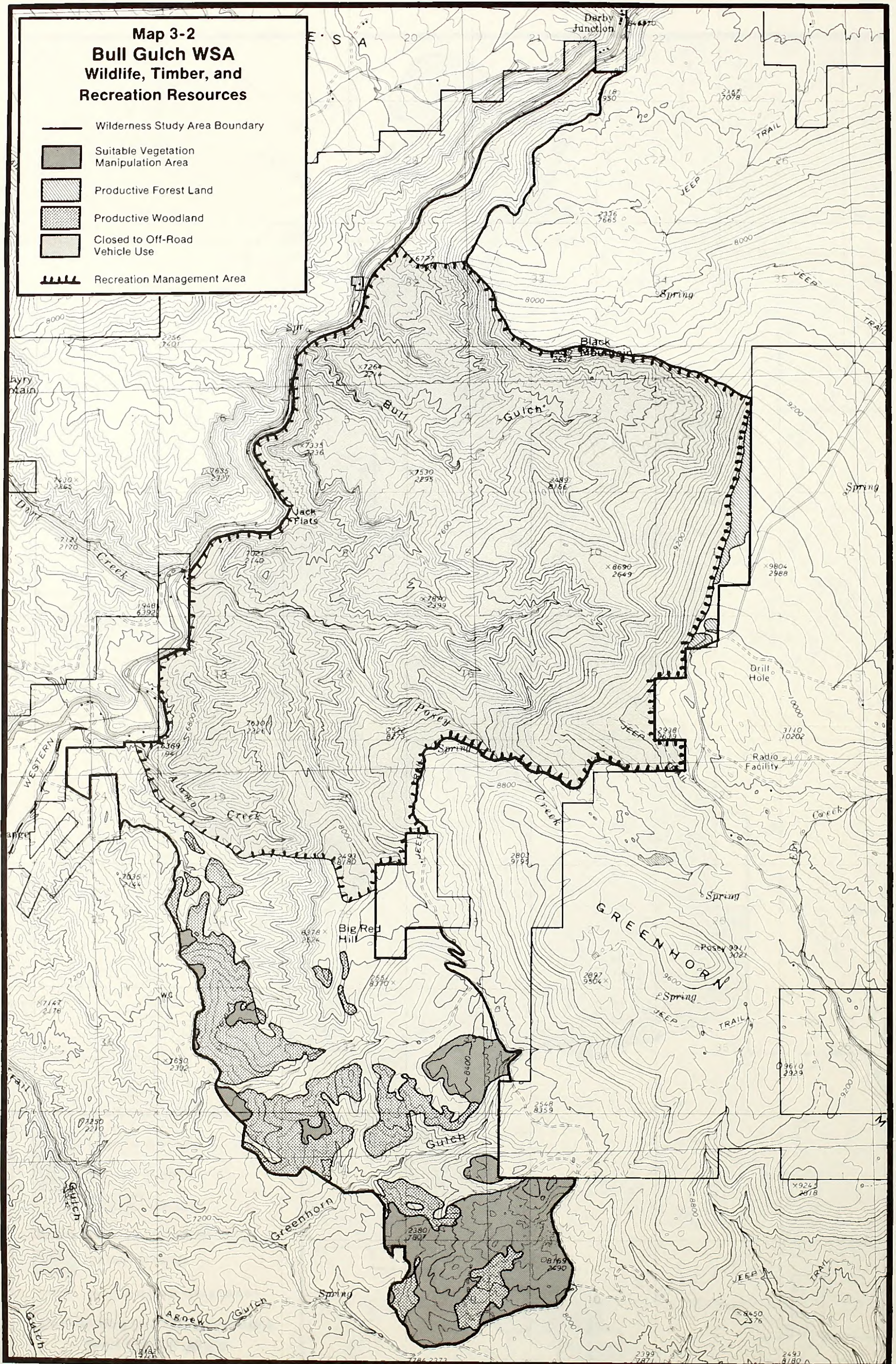
Elevations in Feet and Meters  
Contours at 80 Foot Intervals





**Map 3-2**  
**Bull Gulch WSA**  
**Wildlife, Timber, and**  
**Recreation Resources**

- Wilderness Study Area Boundary
- Suitable Vegetation Manipulation Area
- Productive Forest Land
- Productive Woodland
- Closed to Off-Road Vehicle Use
- Recreation Management Area



Elevations in Feet and Meters  
Contours at 80 Foot Intervals





## AFFECTED ENVIRONMENT

and nonmotorized recreation opportunities in a setting that generally appears to be unmodified by man but does contain evidence of resource activities and uses.

### Wilderness Values

#### Mandatory Wilderness Characteristics

*Size.* The WSA contains 15,000 acres of public land administered by the BLM. No private lands are within the boundaries of the WSA, but 636 acres of split-estate land (federal surface/state-owned subsurface) are within the WSA (see Map 3-1).

*Naturalness.* The WSA is predominantly natural, with a few minor human imprints including ways, fences, and water developments. The majority of these improvements are concentrated along the boundaries, mainly in the southern and eastern portions of the WSA. The interior of the WSA retains a very high quality of naturalness. The steep, rugged topography and vegetation screen these minor human imprints and minimize their impact. The overall influence of these imprints on naturalness is negligible.

Topography restricts influences of outside sights and sounds to the western boundary of the WSA. Automotive traffic, train traffic, and scattered homesites are visible. Steep, red sandstone cliffs and pastoral lands along the Colorado River help minimize these outside influences. The overall visual impressions from within the WSA are of natural and pastoral landscapes.

*Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation.* Size, topography, vegetative screening, and configuration combine to provide outstanding opportunities for solitude in the WSA. The dense pinyon-juniper stands and deep canyons and gulches including Posey and Alamo Creeks and Bull Gulch provide numerous opportunities for solitude in the western portion of the WSA. The eastern portion of the WSA rises up from the canyons through gradual rolling topography to a ridge reaching 10,020 feet. Aspen and spruce-fir are the dominant vegetation, blocking out sights and sounds and increasing opportunities for solitude.

The northern extension of the WSA is an extremely steep cliff wall adjacent to the Colorado River. Opportunities for solitude on the cliff are restricted because the topography limits the number of possible travel routes. The southern extension, although narrow, contains sufficient topographic and vegetative screening to provide numerous secluded places.

The diversity of ecosystems within the WSA provides outstanding opportunities for primitive recreation because of the variety of opportunities and features. The numerous gulches and drainages, specifically Bull Gulch, Posey Creek, and Alamo Creek, offer an exceptional environment for hiking and backpacking. The cliffs along the Colorado River are not conducive for technical climbing but do offer opportunities for scrambling between pinnacles and other rock formations. The wide variety of wildlife including deer, elk, and raptors provide prime opportunities for hunting, bird watching, and photography. The steep sandstone cliffs and canyons offer excellent opportunities for sightseeing and photography. Other activities that can be enjoyed are horseback riding, cross-country skiing, and snowshoeing. Although the Colorado River is not within the WSA, public land within the WSA is used by floatboaters for camping, picnicking, and fishing.

### Special Features

Special features enhance outstanding opportunities for primitive and unconfined recreation in the WSA. They provide scenic, scientific, and educational values through the study of the geologic formations and ecosystems in this section of the Colorado River Canyon.

The unusual sandstone pinnacles and geological formations along the Colorado River provide the WSA with geological, educational, and scenic values. The diversity of ecosystems including the riparian areas along the Colorado River, the arid cliffs and sagebrush areas, the spruce-fir and aspen forests, and the relict community of ponderosa pine offer ecological and educational significance.

The cliffs along the western boundary are a concentration area for raptors, especially red-tailed hawks, prairie falcons, and golden eagles. In addition, large trees along the Colorado River provide hunting perches for bald eagles. Mountain lion are suspected to inhabit the area, although there has been no official siting. Deer and elk winter range areas are located in the western and southwestern portions of the WSA.

Approximately 9,800 acres, mainly the central and eastern portions of the WSA, have been rated as high quality scenery (Class A) in the VRM analysis. Approximately 6,714 acres of this area have been identified as an area of critical environmental concern (ACEC).



## CHAPTER 3

### Land Tenure

The entire WSA is public land administered by the BLM. Minerals are owned by the federal government except for 636 acres of state-owned minerals in Section 16, T. 3 S., R. 85 W., 6th P.M. (see Map 3-1).

## CASTLE PEAK WILDERNESS STUDY AREA (CO-070-433)

### Setting

The Castle Peak WSA consisting of 11,940 acres is approximately 6 miles north of Eagle. The topography varies from gently rolling hills at the lower elevations to the mountain top and rocky cliffs of Castle Peak. Elevations range from 8,400 feet on the northern boundary to 11,275 feet on Castle Peak.

### Soils

The majority of the WSA consists of the Jerry-Cochetopa-Lieg soil association. These soils are deep to well drained and are in the moderate erosion condition class (5 tons per acre per year). The southwestern and southeastern corners of the WSA consist of the Dollard-Pinelli-Unnamed Rock Outcrop-Shale soil association.

These soils are shallow to deep and well drained. The erosion condition class of the southeastern corner is also moderate but the class of the southwestern corner is moderate to high (5 to 8 tons per acre per year) primarily due to the steeper slopes on the south side of Castle Peak.

The sediment yield condition class for the entire WSA is moderate (0.56 to 1.40 tons per acre per year). Table 3-1 lists the average existing annual sediment yield for the watersheds within the WSA.

### Energy and Mineral Resources

A mineral assessment by the BLM within the WSA identified no known mineral resources and a low potential for undiscovered mineral resources including oil and gas (*BLM 1986b*). No mines, prospects, or mineralized areas have been identified within the WSA. Geophysical exploration has occurred in the general area and a well was drilled on private land west of the WSA but was nonproductive. At one time, the entire WSA was leased for oil and gas, however, almost all of these leases were allowed to expire without development.

No mining claims are located within the WSA. Approximately 318 acres in the northeastern portion of the WSA are currently leased for oil and gas (see Map 3-3). This post-FLPMA lease was issued with the stipulation that development can occur only if activities do not impair wilderness values (see Appendix 2).

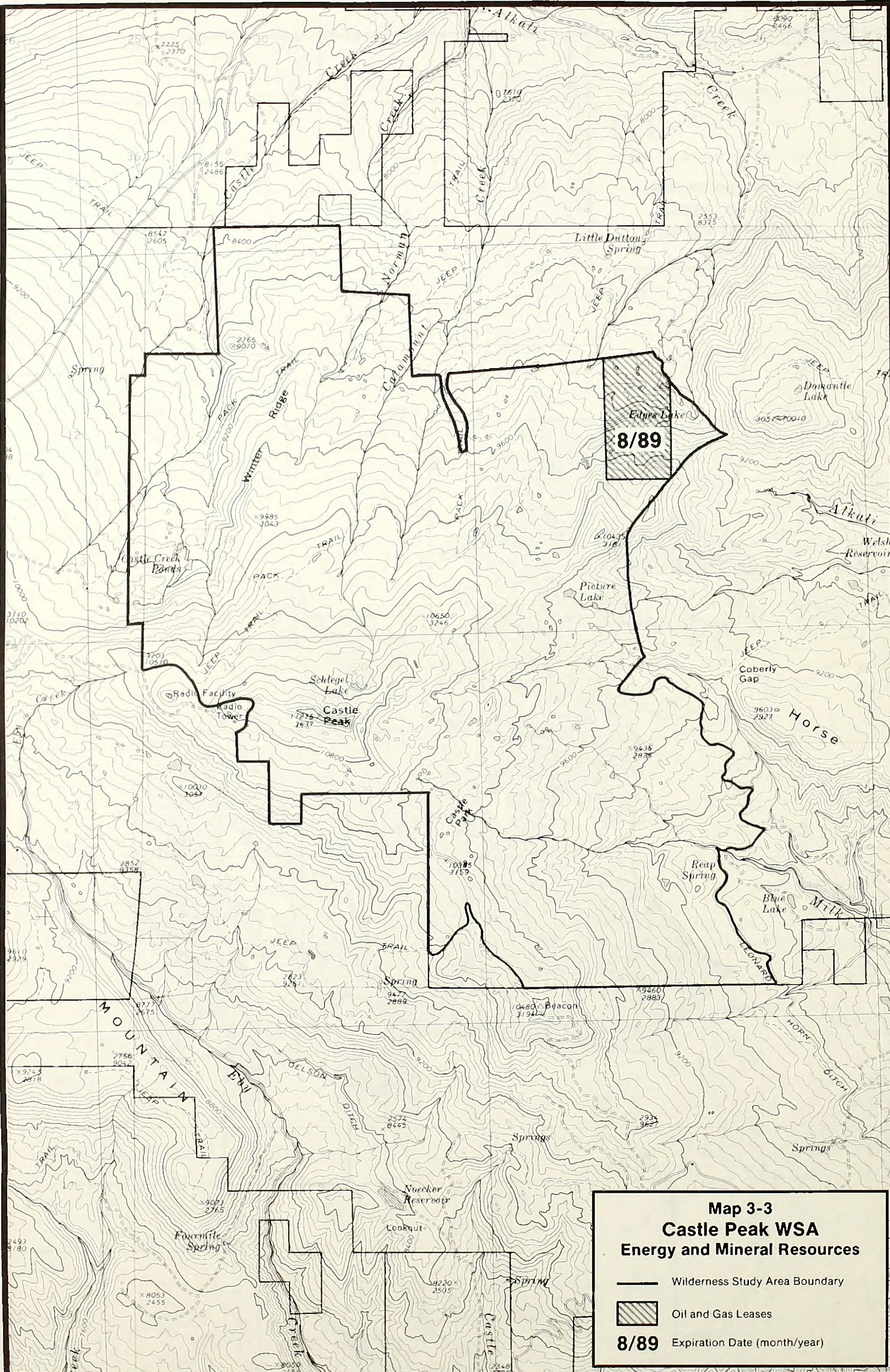
### Aquatic Wildlife

Three creeks and one lake within the WSA are trout fisheries (see Map 3-4). No population sampling has occurred

Table 3-1.  
Sediment yield - Castle Peak Wilderness Study Area


Watershed	Average Annual Acreage Within WSA	Total Acreage of Watershed	Yield (tons/acre/year)
Alkali Creek	260	23,616	0.96
Big Alkali Creek	6,915	28,352	0.66
Eagle Creek	485	62,080	1.20
Milk Creek	4,280	11,232	0.86





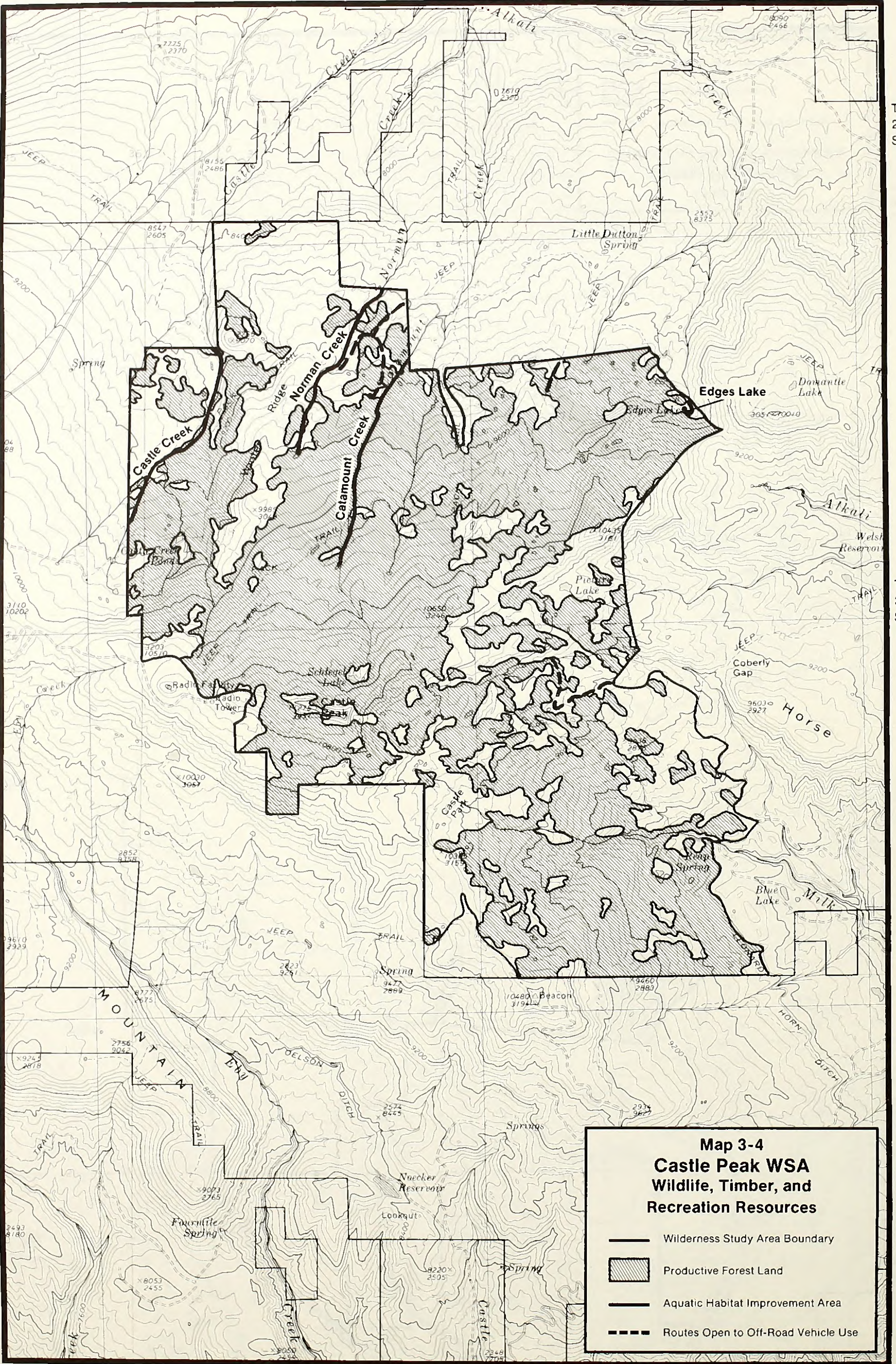
**Map 3-3**  
**Castle Peak WSA**  
**Energy and Mineral Resources**

— Wilderness Study Area Boundary

 Oil and Gas Leases

**8/89** Expiration Date (month/year)





**Map 3-4**  
**Castle Peak WSA**  
**Wildlife, Timber, and**  
**Recreation Resources**

- Wilderness Study Area Boundary
- ▨ Productive Forest Land
- Aquatic Habitat Improvement Area
- - - Routes Open to Off-Road Vehicle Use

1 1/2 0 1 miles

Elevations in Feet and Meters  
Contours at 80 Foot Intervals





## AFFECTED ENVIRONMENT

### Timber Resources

Productive forest lands occur on the majority of the WSA and include 5,450 acres with a total volume of 45.5 MMBF of spruce-fir, 360 acres and 2.7 MMBF of Douglas fir, and 3,640 acres and 10.8 MMBF of aspen. Included within the spruce-fir forest type are the numerous standing dead trees killed by the spruce beetle infestation in the 1940's. The amount of dead material has created a severe fire hazard. The timber stands are in a mature to overmature condition and are declining in health and vigor, resulting in increased susceptibility to mortality, decay, and insect and disease problems.

in these fisheries, but based on the aquatic conditions, it is estimated populations are below average when compared to streams and lakes of comparable size. The habitat conditions of each fishery has been inventoried using a rating system that compared aquatic conditions and percent of optimal habitat based on nine habitat attributes. This system evaluated bottom composition, pool quality, riffle quality, pool to riffle ratio, stream canopy, bank cover, bank stability, percent of bare ground, and presence and size of beaver ponds.

Table 3-2 shows the length or area of each fishery within the WSA, the present aquatic condition, and the aquatic condition trend.

Table 3-2.  
Aquatic Habitat - Castle Peak Wilderness Study Area

Name	Length/Area Within WSA	Aquatic Condition <sup>1</sup>	Trend
Castle Creek	2.9 miles	Poor	Stable to Improving
Catamount Creek	1.9 miles	Below Average	Stable
Norman Creek	1.0 mile	Below Average	Declining
Edges Lake	3.0 acres	Below Average	Declining

<sup>1</sup> Rating system: Excellent, Above Average, Average, Below Average, Poor.

### Terrestrial Wildlife - Big Game

The WSA is considered to be summer range for both deer and elk. Although specific areas have not been identified, the forested areas within the WSA (see Map 3-4) provide calving areas for elk and the aspen forest within the WSA provides fawning areas for deer.

Deer and elk are present in the WSA year-round, but the greatest concentrations occur during the summer. The estimated populations during the summer are 1,000 deer and 400 elk. The Colorado Division of Wildlife's population goals for the general area are a 22 percent increase for deer and a 5 percent decrease for elk by 1988. Sufficient forage exists to support existing and projected populations and forage quality and browse condition are considered good.

The Castle Peak area is considered to have the greatest potential for management of the spruce-fir forest type in the Resource Area and represents 22 percent of the productive forest land in the Glenwood Springs Resource Area. The volume of spruce-fir represents 56 percent of the total spruce-fir volume in the resource area. On a sustained yield basis, an average of 105 acres with a volume of 0.66 MMBF could be harvested annually. However, this is considered insignificant when compared to an annual harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.

### Recreation Opportunities and Use

No complete recreation use data for the WSA is available. Annual visitor-use estimates are approximately 50 fishing visits, 25 camping/hiking visits, 150 off-road vehicle visits, 1,375 big game hunting visits, and 450 small game hunting visits per year.



## CHAPTER 3

The ORV designation for the entire WSA limits ORV use to designated routes except for snowmobiles operating on snow. This designation allows opportunities for both nonmotorized and motorized recreational activities but restricts most motorized use to specific routes totalling 2.5 miles as shown on Map 3-4. The area is managed to provide both motorized and nonmotorized recreation opportunities in a setting that generally appears to be unmodified by man but does contain evidence of other resource activities and uses.

Legal access to the WSA is limited. Motorized access is only available along the eastern boundary but hiking access is also available at the northwest corner of the WSA. Additional legal access needs have been identified through private land to the west and north of the WSA.

## Wilderness Values

### Mandatory Wilderness Characteristics

*Size.* The WSA contains 11,940 acres of public land administered by the BLM. No private or state lands exist within the WSA.

*Naturalness.* The imprints of man within the WSA have been determined to be substantially unnoticeable. These imprints include six ways, five fences, two irrigation ditches, a network of pack trails, a rain gauge, and a snow measuring course. Spruce and aspen stands in combination with the rolling topography screen these imprints of man which are scattered throughout the 11,940 acre WSA. A visitor perceives the WSA as being primarily natural in character but with signs of man's use of the area.

*Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation.* The WSA's size, blocked configuration (3 miles wide, 5 miles long), and vegetative and topographic screening combine to provide outstanding opportunities for solitude. This large area increases the chances that an individual will feel isolated from others and undisturbed by the sights and sounds of man within and outside of the WSA. The dense spruce forest, aspen stands, meadows, and numerous ponds create vegetative barriers from the sights and sounds of other individuals and enables a visitor to find a secluded spot. The rolling topography and vertical rock slopes provide additional screening and a feeling of spaciousness. The effective screening allows for a relatively high recreation carrying capacity, while maintaining excellent opportunities for seclusion.

The effective screening also reduces the impacts of man's activities which occur outside the WSA. Motorized vehicles may be seen or heard periodically from the perimeter of

the WSA because numerous ways exist near the boundaries. However, ample opportunities exist to find places which are vegetatively or topographically screened from these outside sights and sounds.

The WSA provides outstanding opportunities for primitive and unconfined types of recreation as a result of the diversity in vegetation and topography, the existence of numerous water features, and the number of activities which can be engaged in by visitors.

The WSA provides a large number of opportunities for primitive unconfined types of recreation. The diversity of vegetation ranges from dense spruce forests to park-like aspen stands, both spotted with small mountain meadows, lakes, ponds, and streams. The topography consists mainly of an expansive mountain top with rocky cliffs and rolling hills. Elevations range from approximately 8,400 to 11,275 feet. The diversity of topography, water resources, and vegetation provides habitat for numerous wildlife species. The elevational variety accommodates seasonal changes in vegetation types and abundances of wildlife in addition to opportunities for winter sports activities provided for by abundant snow.

This diversity of ecosystems provides for a large variety of primitive and unconfined recreational activities including hiking, backpacking, hunting, horseback riding, photography, fishing, nature study, and sightseeing.

The network of trails, although not maintained, in the northwestern half of the WSA provides transportation routes which enhance the recreation opportunities.

## Special Features

The basalt geological formation of Castle Peak (11,275 feet) which is visible for a 10 mile radius is the most prominent geologic feature within the WSA and in the Eagle River Valley. The peak differs substantially from the geology and scenery of the surrounding locale and is an important feature in the scenic quality of the area, both from within and outside of the WSA.

The diversity of topography and vegetation provides the WSA with scenic and ecological values. Approximately 10,500 acres have been rated as high quality scenery (Class A). Although these values are not unique to the region, they do enhance the quality of the wilderness values. The relatively unaltered ecosystems and scenery of the WSA contrast with the surroundings where man's influence is more noticeable and thus highlights the primeval character of the WSA. The vegetation also provides excellent habitat for deer and elk.



## CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

### CHAPTER FOUR ENVIRONMENTAL CONSEQUENCES







# CHAPTER 4

## ENVIRONMENTAL CONSEQUENCES

This chapter analyzes the environmental and economic impacts of the alternatives identified in Chapter 2 on the resource values discussed in Chapter 3, Affected Environment. Each wilderness study area (WSA) is analyzed independently. Impacts under the Partial Wilderness Alternative are analyzed only for the Bull Gulch WSA.

Geology and paleontology, topography, climate, threatened and endangered plant species, noise, and alluvial valleys and prime and unique farmlands would not be affected by any of the alternatives and are therefore not discussed.

### ASSUMPTIONS AND GUIDELINES

1. The analysis for each WSA is based on the resource allocations adopted in the 1984 *Glenwood Springs Resource Management Plan* and the management prescriptions that would result under each alternative. Based on current knowledge, site-specific management actions, locations, and dates of implementation cannot be determined for all resource management activities. Additional site-specific activities will be identified in the future through the development of activity plans and project plans. Each phase will include environmental assessments with an increasing level of specificity. Following is the relationship between resource management plans, activity plans, and project plans.

*Resource Management Plans (RMPs)* — RMPs identify the allocation of public land resources, broad production goals, and restrictions on resource programs to protect important resource values. Specific actions are identified only to the extent necessary to satisfy the above criteria.

*Activity Plans* — Activity plans identify the management actions to be implemented in a specific geographic area to achieve the decisions made in an RMP. These plans set forth the direction for management (administration, development, and protection) of resources, identify specific

management actions to be implemented, and establish the general sequence of implementation.

*Project Plans* — Project plans identify the site-specific design, development, operation, and rehabilitation actions to implement the management decisions made in an activity plan.

The analyses include the management actions identified in the RMP. In lieu of actions that will be developed in activity plans and project plans, projections of feasible or anticipated activities have been made to allow the analysis of impacts under the alternatives. These projections are expressed in terms of averages or ranges. In addition, a list of possible actions or methods that could be used in the management of various resources depending on site-specific resource objectives or requirements is in Appendix 1.

2. The RMP identified required management stipulations that will be included in project designs and are considered to be standard operating procedures. These stipulations are listed in Appendix 1. Because these stipulations would reduce or eliminate adverse impacts caused by various management activities, the analyses in this document reflect their mitigative effects. Additional stipulations may be imposed depending on site-specific resource objectives and requirements and will be identified in future activity plans, project plans, and environmental assessments.
3. Standard stipulations for oil and gas leasing may be added to any oil and gas leases at the discretion of the authorized officer. These stipulations are listed in Appendix 2.
4. Short-term impacts, for the purpose of this EIS, are those occurring within five years after implementation. Long-term impacts are those occurring more than five years after implementation.
5. If designated as wilderness, each WSA will be managed according to the Wilderness Act of 1964 and the BLM's *Wilderness Management Policy* which provide guidance as to activities which are permissible within wildernesses and determine how wilderness and various resource values, including nonconforming uses, are analyzed.
6. If not designated a wilderness, each WSA will be managed according to the RMP and applicable laws and regulations. This management is described under



## CHAPTER 4

the No Wilderness/No Action Alternative for each WSA. The RMP describes the management of public land in the Glenwood Springs Resource Area for approximately 20 years. Other than changes that may result from wilderness designation (as described under the All Wilderness Alternative), no changes in the overall management prescribed by the RMP is anticipated in the foreseeable future.

7. The BLM's *Interim Management Policy and Guidelines for Lands Under Wilderness Review (IMP)* provides guidance as to activities that are permissible within WSAs studied under Section 603 of the Federal Land Policy and Management Act of 1976 (FLPMA) until Congress' decision is made. Current BLM policy is to similarly manage WSAs studied under Section 202. For the purpose of analysis, other resource management activities or proposals are analyzed as though the IMP is not a factor. However, activities or proposals that do not conform to the IMP would be deferred until a nondesignation decision by Congress releases a WSA, or portion thereof, from the interim management restrictions.
8. The two WSAs that are less than 5,000 acres in size, Eagle Mountain and Hack Lake, are contiguous to existing wildernesses administered by the U. S. Forest Service. Because of their small size, they are manageable for wilderness only as additions to the existing wildernesses.

## MITIGATION MEASURES

The RMP includes required management stipulations that would reduce the adverse impacts of various actions. These stipulations are listed in Appendix 1. As explained above in Assumption 2, the analyses in this document reflect the mitigative effects these stipulations would have on various proposed management actions. In addition, mitigation will be included in environmental assessments for activity plans and project plans that will be required in the future. Therefore, no additional mitigating measures will be discussed in this document.

## EAGLE MOUNTAIN WILDERNESS STUDY AREA (CO-070-392)

### PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)

Acres recommended suitable — 330  
Acres recommended nonsuitable — 0

#### Energy and Mineral Development

Wilderness designation would withdraw 330 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. Unless valid rights are established by discovery for the 23 mining claims within the WSA, the mineral potential of the entire WSA would be foregone. Based on the identified low potential for all minerals, establishment of valid rights is not expected. The adverse impact on mineral development would be insignificant because of the identified low potential for all minerals and the low probability that exploration or development would occur.

*Conclusion:* Impacts would be insignificant because of the identified low potential for all minerals. Exploration and development of potential undiscovered energy and mineral resources would be prohibited on 330 acres subject to valid existing rights. No valid rights are anticipated.

#### Wilderness Values

Wilderness designation would have short and long-term benefits to all wilderness values by providing statutory protection to the aspen-covered south eastern flank of Eagle Mountain which is a natural extension of the Maroon Bells-Snowmass Wilderness Area. The naturalness of the area would be preserved and natural ecological changes would continue to occur. Although the opportunities for solitude and primitive recreation are not considered to be outstanding in the WSA's 330 acres, the mountain as an extension of the Maroon Bells-Snowmass Wilderness shares the wilderness area's outstanding opportunities for primitive recreation and solitude. Preservation of wilderness values would in turn protect the WSA's scenic qualities. Opportunities would exist to use the WSA, as part of the Maroon Bells-Snowmass Wilderness and as a scientific benchmark to study unmodified natural processes.

*Conclusion:* The 330 acres designated as wilderness would receive long-term statutory protection and all wilderness values would be maintained.



## ENVIRONMENTAL CONSEQUENCES

### NO WILDERNESS ALTERNATIVE (NO ACTION ALTERNATIVE)

Acres recommended suitable — 0  
Acres recommended unsuitable — 330

#### Energy and Mineral Development

Under this alternative, energy and mineral exploration and development would not be affected because potential energy and mineral resources would be available for development. Exploration and development of locatable mineral resources would be allowed throughout the WSA subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Exploration and development of leasable minerals would be allowed subject to the standard stipulations attached to all leases. No development is anticipated since the potential for all minerals is low; however, some minor exploration activities are anticipated because of the assessment work required to keep the 21 unpatented mining claims and 2 unpatented lode claims current.

*Conclusion:* There would be no effect on energy and mineral exploration and development because potential mineral resources would be available for exploration and development. However, no exploration and development is anticipated because of the identified low potential for all minerals.

#### Wilderness Values

Nondesignation of the WSA could have short-term and long-term adverse impacts to the wilderness values of the aspen-covered southeastern flank of Eagle Mountain which is a natural extension of the Maroon Bells-Snowmass Wilderness Area. In the absence of statutory protection, there would be a potential loss of wilderness character because the entire WSA would remain open to mineral exploration and development. Exploration activities are not expected to exceed historical levels which have produced no discernible impacts. If mineral development activities on the 23 mining claims in the WSA would occur, they would impair the naturalness of the area and would reduce the opportunities for solitude and primitive recreation which are enhanced by the adjacent Wilderness Area. However, no development is anticipated because of the identified low potential for all minerals.

*Conclusion:* Existing management restrictions, combined with the lack of development potential is expected to protect all wilderness values in the long term. No adverse impacts

to wilderness values are anticipated in the foreseeable future even in the absence of statutory protection.

### HACK LAKE WILDERNESS STUDY AREA (CO-070-425)

#### PROPOSED ACTION (ALL WILDERNESS ALTERNATIVE)

Acres recommended suitable — 10  
Acres recommended unsuitable — 0

#### Energy and Mineral Exploration Development

Wilderness designation would withdraw 10 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. Unless valid rights are established by discovery, the mineral potential of the entire WSA would be foregone. Based on the absence of existing claims and the identified low potential for all minerals, establishment of valid rights is not expected. The adverse impact on mineral exploration development would be insignificant based on the small acreage, the identified low potential for all minerals, and the low probability that exploration or development would occur.

*Conclusion:* Impacts would be insignificant because of the identified low potential for all minerals. Exploration and development of mineral resources would be prohibited on 10 acres subject to valid existing rights. No valid rights are anticipated.

#### Wilderness Values

Wilderness designation would have short and long-term benefits to all wilderness values by providing statutory protection. The naturalness of the area would be preserved and natural ecological changes would continue to occur. Although the opportunities for solitude and primitive recreation are not considered to be outstanding because of the WSA's small size, the existing opportunities would be maintained. These opportunities would be enhanced by similar values in the adjacent Flat Tops Wilderness Area. Preservation of wilderness values would in turn protect the WSA's scenic qualities. Opportunities would exist to use the WSA as part of the Flat Tops Wilderness and as a scientific benchmark to study unmodified natural processes.



## CHAPTER 4

*Conclusion:* The 10 acres designated as wilderness would receive long-term statutory protection and all wilderness values would be maintained.

### NO WILDERNESS ALTERNATIVE (NO ACTION ALTERNATIVE)

Acres recommended suitable — 0  
Acres recommended unsuitable — 10

#### Energy and Mineral Exploration and Development

Under this alternative, energy and mineral exploration development would not be affected because potential energy and mineral resources would be available for development. Exploration and development of locatable mineral resources throughout the WSA would be allowed subject to surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Oil and gas leasing would continue to be allowed subject to the existing no surface facilities stipulation. Exploration and development of other leasable minerals would be allowed subject to the standard stipulations attached to all leases. No exploration or development would be anticipated since the potential for all minerals is low.

*Conclusion:* There would be no effect on energy and mineral exploration development because potential mineral resources would be available for development. However, no exploration and development is anticipated because of the low potential for all minerals.

#### Wilderness Values

No adverse impacts to the wilderness values of the two, flat-topped fingers that are topographically part of the Flat Tops Wilderness Area are anticipated under this alternative. Management and restrictions including the no surface occupancy stipulation on oil and gas leasing, the unsuitable classification for utility and communication facilities, and the off-road vehicle closure are expected to provide long-term administrative protection of the WSA's wilderness values even in the absence of statutory protection. Because of this management, the WSA's location, the lack of existing mining claims and leases, and the low development potential, the area is expected to remain a "de facto" wilderness.

*Conclusion:* In the absence of statutory protection, existing management restrictions, combined with the lack of development potential, is expected to protect all wilderness values in the long term. No adverse impacts to wilderness values would be anticipated in the foreseeable future.

## BULL GULCH WILDERNESS STUDY AREA (CO-070-430)

### PROPOSED ACTION (PARTIAL WILDERNESS ALTERNATIVE)

Acres recommended suitable — 10,414  
Acres recommended unsuitable — 4,586

#### Erosion and Sedimentation

In the suitable portion of the WSA, wilderness designation would prevent increases in erosion and sedimentation on 9,778 acres by precluding surface-disturbing activities. Initially, there would be a very low potential for increases in erosion and sedimentation on the 636 acres of state-owned minerals because this area would remain open to mineral leasing at the State's discretion. However, no exploration or development are anticipated because of the identified low potential for all minerals.

In the unsuitable portion of the WSA, timber and woodland harvest and vegetation manipulation of sagebrush would affect erosion and sedimentation rates. The short-term and long-term effects for typical sites where timber harvesting and vegetation manipulation would occur are shown in Table 4-1.

Since the primary effect of changes in erosion would be changes in sedimentation, only the effects on sedimentation will be discussed. The WSA is in the upper Colorado River watershed. The portion of the watershed lying east of the Colorado River that drains directly into it totals 75,300 acres. In the *Northwest Colorado Council of Governments 208 Plan*, the estimated sediment yield to drainage channels for the entire watershed is presently estimated at 95,000 tons/year. Only a portion of this sediment yield is actually transported into a moving perennial stream during the year. The 208 plan considers any increase in sediment movement of up to 25% to be insignificant. The Colorado Land Use Commission has also classed each stream in this watershed to have a low to moderate actual stream sediment yield of 2,500 tons/year per stream.

In the short-term, timber harvesting and vegetation manipulation would cause initial increases in sedimentation. Under a worst-case situation in which sagebrush would be treated by burning and woodland and forest land would be clearcut, the treatment of 38 acres of sagebrush, harvest of 22 acres of woodland and 45 acres of forest land would increase sedimentation by an estimated 200 tons in the first year based on Table 4-1. This is less than one percent of the threshold level of change in the 208 plan for this watershed. Sedimentation would decline rapidly in the



## ENVIRONMENTAL CONSEQUENCES

Table 4-1.  
Expected Erosion and Sedimentation from Vegetation Manipulation and Timber Harvesting -  
Bull Gulch Wilderness Study Area (in tons per acre per year)

Site Type (Vegetation/ Percent Slope)	Treatment Method	Present		Short-Term <sup>1</sup>		Long-Term <sup>2</sup>	
		Actual Sediment Delivered to Drainage Channel	Actual Erosion	Actual Sediment Delivered to Drainage Channel	Erosion	Sediment Delivered to Drainage Channel	Erosion
Sagebrush- 15% Slope	Mechanical Treatment	0.9	2.8	1.1	3.4	0.7	2.1
Sagebrush- 20% Slope	Burning	1.8	4.2	6.6	15.6	1.6	3.9
Mixed Conifer Forest- 25% Slope	Selective Cutting	0.6	1.1	2.3	4.5	0.6	1.1
	Clear- Cutting	0.6	1.1	3.4	6.8	0.6	1.1
Aspen Forest- 25% Slope	Clear- cutting	0.6	1.1	3.4	6.8	0.6	1.1
Pinyon- Juniper Forest- 25% Slope	Selective Cutting	3.4	6.8	5.7	11.3	2.9	5.7
	Clear- Cutting	3.4	6.8	6.6	13.2	2.9	5.7

<sup>1</sup> One year after treatment

<sup>2</sup> Ten years after treatment

following two to three years as new vegetation became established and would decline more slowly thereafter. By the tenth year, the restored or improved ground cover conditions on harvest and treatment areas would be expected to bring sedimentation to, or below, current levels. On an overall basis, neither the short-term increases nor the long-term decreases in erosion would exceed the criteria in the *Northwest Colorado Council of Governments 208 Plan*.

Road construction to access timber sales are expected to have a negligible impact on sedimentation because of the small acreage affected and because roads would be constructed in conformance with BLM road standards that are designed to minimize erosion. Assuming an average width of disturbance of 25 feet, approximately three acres would be disturbed per mile of road. The three to four miles of road that would be constructed to access sale areas each

year would disturb only nine to twelve acres. Actions dictated by the BLM road standards, including revegetation of cut and fill slopes, stabilization of road surfaces, and installation of culverts, ditches, and waterbars to control water movement will reduce potential runoff and erosion. Sedimentation from road construction would, therefore, be negligible and is not included in the 200 tons referenced above.

*Conclusion:* Designation would prevent increases in erosion and sedimentation in the suitable portion of the WSA (10,414 acres). In the unsuitable portion, timber harvesting and vegetation manipulation on an average of 105 acres disturbed per year would cause short-term increases in erosion and sedimentation rates of up to 200 tons per year. In the long term, rates would decline to, or below, existing levels.



## CHAPTER 4

### Energy and Mineral Development

Wilderness designation would withdraw 9,778 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. Unless mining claims are located within this area and valid rights are established by discovery, the mineral potential of this portion of the WSA would be foregone. No valid rights are anticipated. Since no mineral leases currently exist within the suitable portion, the only effect would be the preclusion of new leases.

The withdrawal would not cause significant adverse impacts to mineral exploration and development because the development potential for all minerals is low and the lack of development on previous leases indicates low interest and the probability that exploration or development may never occur.

The 636 acres of state-owned minerals would initially be open to leasing at the State's discretion. Restrictions on access and development would be imposed on any proposed mineral activities to reduce or prevent impairment of wilderness values. Attempts would be made to acquire the mineral estate from the State and this area would also be withdrawn following acquisition. There is a high probability the mineral estate would be acquired because the State has expressed a willingness to exchange state-owned land within BLM wilderness. No significant impacts would occur because of the identified low potential for all minerals and the probability that exploration and development may never occur.

Energy and mineral exploration development would not be affected in the nonsuitable portion of the WSA (4,586 acres) because potential energy and mineral resources would be available for development. Exploration and development of locatable mineral resources would be allowed subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Oil and gas leasing on 207 acres would continue to be allowed subject to the existing no surface facilities stipulation (see Appendix 2). Oil and gas leasing on 950 acres would continue to be allowed subject to existing seasonal restrictions. In the remaining 3,429 acres of the nonsuitable portion, exploration and development of leasable minerals would continue to be allowed subject to the standard stipulations attached to all leases. No exploration or development are anticipated because the development potential for all minerals is low.

*Conclusion:* There would be no effect on mineral exploration or development in the WSA because of the low potential for all minerals. Exploration and leasing could be allowed on 3,429 acres in the nonsuitable portion and on 636 acres of stated owned minerals in the suitable portion.

An additional 1,157 acres in the nonsuitable portion would be available for leasing subject to no surface occupancy or seasonal stipulations. Mineral activity would be prohibited on 9,778 in the suitable portion but no activity is expected to occur.

### Big Game Habitat and Populations

Wilderness designation of the suitable portion (10,414 acres) of the WSA would prevent habitat disruption in critical winter range for projected populations of 160 elk and 850 deer.

Although no mineral exploration and development is anticipated in the nonsuitable portion of the WSA, the no surface occupancy stipulation on oil and gas leasing would also prevent habitat disruption on 207 acres of crucial deer and elk winter range. The seasonal leasing restrictions on 950 acres would prevent habitat disruption during the time periods when the greatest concentration of deer and elk are present in the WSA.

In the nonsuitable portion of the WSA, habitat improvements in crucial winter range on 1,048 acres of productive woodland following timber harvesting and up to 750 acres of sagebrush would increase forage available to deer and elk by 525 AUMs and 750 AUMs, respectively, over the long term. Because sufficient forage already exists to support projected populations of 850 deer and 160 elk, the most significant benefits would be the improved forage quality and browse conditions in critical winter range. These improvements would be expected to alleviate early movement of deer and elk to winter ranges at lower elevations, thus, reducing utilization and increasing the availability of forage on those lower winter ranges which would be especially beneficial during severe winters. The improved condition and availability of forage would improve the overall condition of the animals, enhance reproduction, and reduce winter mortality. Although these factors could potentially increase populations, it is assumed the Colorado Division of Wildlife will manage the herds as necessary to meet and maintain the projected population goals.

The average annual timber harvest on 24 acres and vegetation manipulation on 38 acres would have short-term adverse impacts on deer and elk including temporary loss of forage, thermal and hiding cover, and solitude during harvest and treatment periods. The overall impact would be negligible because of the small amount of acreage affected annually in the WSA (an average of 62 acres or 0.4 percent of the WSA) and because the required management stipulations for timber harvesting and vegetation manipulation restrict the size and design of project areas, provide for retention of hiding cover adjacent to project areas, and restrict activities during fawning periods and the winter when the greatest concentration of animals are present. The long-term benefits that would result from improved habitat



## ENVIRONMENTAL CONSEQUENCES

conditions are considered to far outweigh the minor short-term impacts that would occur.

*Conclusion:* Wilderness designation and mineral leasing restrictions would prevent disruption on 10,621 acres. Projected populations of 850 deer and 160 elk would be maintained. Habitat improvements on 1,798 acres would increase wildlife forage by 1,275 AUMs and improve winter range conditions to help sustain deer and elk populations over the long term.

### Timber Production

Timber production would be allowed on forest land and woodland in the current allowable harvest base. All productive forest land and productive woodland identified for management in the RMP within the WSA are located in the nonsuitable portion. Approximately 137 acres and 0.65 MMBF of timber and 1,048 acres and 14,250 cords of fuelwood would be available for management and commercial harvesting. This acreage represents about 8 percent of the acreage suitable for management in the Glenwood Springs Resource Area. On a sustained yield basis, an average volume of 8,000 board feet of timber and 300 cords of woodland would be harvested annually. These harvest levels would represent less than one percent of the annual allowable harvest for timber (1.8 MMBF) and 9 percent of the annual allowable harvest for pinyon-juniper (3,535 cords) on public land in the resource area. However, because an average annual harvest of 8 MBF of timber would not be economically feasible, it is assumed harvesting would occur in three harvests at 20 to 30 year intervals with each harvest including approximately 0.22 MMBF of timber. Each harvest would represent about twelve percent of the annual allowable harvest in that year.

*Conclusion:* The annual average sustained yield would be 8,000 board feet of timber (2 acres) and 300 cords of fuelwood (22 acres).

### Recreational Opportunities and Use

Wilderness designation would maintain recreational opportunities or settings in the suitable portion of the WSA (10,414 acres). The suitable portion is currently closed to ORV use and is managed to provide nonmotorized recreation opportunities such as backpacking, hunting, and hiking in a natural setting. This management would continue if wilderness designation would occur. An additional 562 acres inside the suitable portion but outside of the resource management area would be closed to ORV use, but no known use is occurring nor anticipated in the affected area because of unsuitable topography. Thus, the types of recreational activities presently occurring in the suitable portion would not change. Designation would also not affect

floatboating and fishing use on the portion of the Colorado River adjacent to the WSA.

In the nonsuitable portion (4,586 acres), all existing recreational opportunities, including ORV use, would continue to be available. Although timber harvesting, vegetation manipulation, and continued ORV use would have localized adverse effects on nonmotorized recreation opportunities, the overall effect would be negligible because of the small acreage involved (62 acres or 0.4 percent of the WSA per year) and the low amount of primitive recreation use (100 visits annually for camping and hiking) in these areas. Primitive recreation use would shift from project areas to undisturbed portions of the WSA. ORV use would tend to shift into these disturbed areas because of improved access.

Changes in recreational settings should be a negligible effect on recreational opportunities. A study (*Brown 1981*) of setting preferences for various activities, specific to the Glenwood Springs Resource Area, indicated a high overall preference for natural settings but that preferences for many activities, such as hunting, were nearly equal for settings ranging from natural environments to those that are roaded and contain moderate evidence of other activities and uses. This study also indicates that changes of individual settings are generally less important than maintaining a variety of settings.

Use levels, totaling about 700 visits per year, are expected to remain at current levels.

*Conclusion:* Wilderness designation would maintain recreational opportunities or settings in the suitable portion of the WSA (10,414 acres). All recreational opportunities including ORV use would continue to be available in the nonsuitable portion (4,586 acres). Use levels in the WSA totaling about 700 visits annually are expected to remain at current levels.

### Wilderness Values

Wilderness designation of 10,414 acres in the northern two-thirds of the WSA would have short and long-term benefit to wilderness values by providing statutory protection of the area's high quality naturalness, ecological diversity, scenic and geologic values, and deep canyons and gulches which provide outstanding opportunities for solitude and primitive recreation. Opportunities would be provided to use the WSA as a scientific benchmark to study undisturbed natural processes. However, wilderness preservation would not be assured on 636 acres of the suitable acreage because of state owned minerals. There are no resource conflicts on the remaining 9,778 acres in the suitable portion.

Mineral leasing could continue on the 636 acres of state-owned minerals in the east-central portion of the WSA at the State's discretion. Mineral development on this area could



## CHAPTER 4

cause a loss of naturalness because of the rights for access and development tied to such leases. No development is anticipated however, because of the low potential for all minerals. In addition, the State has expressed a willingness to exchange mineral estates in BLM wilderness. If the mineral estate would be acquired, this 636 acre area would be withdrawn from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation.

Forest management and harvesting and sagebrush treatments would impair naturalness over the long term on about 1,798 acres in the southern one-third of the unit which is the nonsuitable portion. This area consists of tree and shrub-covered mountain slopes, gullies, and rocky outcrops. The absence of statutory protection could also result in the potential loss of naturalness on the remaining 2,788 acres of the nonsuitable portion because other uses could be allowed without concern for wilderness values. The overall effect would be the loss of wilderness potential throughout the entire 4,586 acres of the nonsuitable portion of the WSA. Timber harvesting, vegetation manipulation, and continued ORV use would also cause localized reductions of the opportunities for primitive recreation and solitude in the nonsuitable portion.

*Conclusion:* Wilderness designation would provide long-term statutory protection. Preservation of all wilderness values would be assured on 9,778 acres and is anticipated on the remaining 656 acres of the suitable portion. There would be a loss of naturalness on 1,798 acres in the nonsuitable portion and the potential loss of naturalness on the remaining 2,788 acres in the unsuitable portion over the long term. Localized reductions of opportunities for primitive recreation and solitude would be lost on 4,586 acres.

### ALL WILDERNESS ALTERNATIVE

Acres recommended suitable — 15,000

Acres recommended nonsuitable — 0

#### Erosion and Sedimentation

Wilderness designation of the entire WSA would prevent increases in erosion and sedimentation on 14,364 acres by precluding surface-disturbing activities, including proposed timber harvesting and vegetation manipulation. There would be a very low potential for increases in erosion and sedimentation on the 636 acres of state-owned minerals. Although this area's minerals could be leased at the State's discretion, no exploration or development are anticipated because of the identified low potential for all minerals.

*Conclusion:* Erosion and sedimentation would remain at current levels because timber harvesting and vegetation manipulation would be precluded.

#### Energy and Mineral Development

Wilderness designation would withdraw 14,364 acres from appropriation under the mining laws and from leasing under the mineral leasing laws, subject to valid existing rights as of the date of designation. Unless mining claims are located within the WSA and valid rights are established by discovery, the mineral potential of this portion of the WSA would be foregone. No valid rights are anticipated. The withdrawal from mineral leasing would not affect leases existing at the time of designation but would preclude renewal or new leasing from occurring.

The withdrawal would not cause significant adverse impacts to mineral exploration and development because the development potential for all minerals is low and the lack of development on previous and existing leases indicates low interest and the probability that exploration and development may never occur.

The 636 acres of state-owned minerals would initially be open to leasing at the State's discretion. Restrictions on access and development would be imposed on any proposed mineral activities to reduce or prevent impairment of wilderness values. Attempts would be made to acquire the mineral estate from the State and this area would also be withdrawn following acquisition. There is a high probability the mineral estate would be acquired because the State has expressed a willingness to exchange state-owned land within BLM wilderness. No significant impacts would occur because of the identified low potential for all minerals and the probability that exploration and development may never occur.

*Conclusion:* There would be no significant impacts because of the low development potential for all minerals. Exploration and development of potential energy and mineral resources would be prohibited on 14,364 acres, subject to valid existing rights. No valid rights are anticipated. The 636 acres of state-owned minerals would be available for development initially, but would also be withdrawn from development if the mineral estate is acquired.

#### Big Game Habitat and Populations

Wilderness designation of the entire WSA (15,000 acres) would prevent habitat disruption in critical winter range for projected populations of 160 elk and 850 deer.

Wilderness designation would preclude proposed projects on 1,798 acres to improve forage for deer and elk in critical winter range within the WSA. Because sufficient forage already exists to support projected populations of 850 deer



## ENVIRONMENTAL CONSEQUENCES

and 160 elk, the most significant effect would be the lack of improvement of forage quality and browse condition. Early movement of deer and elk to winter ranges at lower elevations would continue, resulting in increased utilization and reduced availability of forage on those lower winter ranges which could be especially critical during severe winters. The decrease in the condition and availability of forage could reduce the overall condition of the animals, reduce reproduction, and increase winter mortality. Although these factors could potentially reduce populations, it is assumed the Colorado Division of Wildlife will manage the herds as necessary to meet and maintain the projected population goals.

*Conclusion:* Wilderness designation of the entire WSA would prevent habitat disruption on 15,000 acres. Projected populations of 850 deer and 160 elk would still be maintained although the forage quality and browse condition for these animals would not be improved.

### Timber Production

Wilderness designation would preclude management and harvesting of 137 acres and 0.65 million board feet (MMBF) of sawtimber and 1,048 acres and 14,250 cords of fuelwood. The acreage foregone represents about 8 percent of the acreage suitable for management in the Glenwood Springs Resource Area. The average annual harvest levels of 8 thousand board feet of timber and 300 cords of fuelwood that would be removed from the allowable harvest base represent less than one percent of the annual allowable harvest for timber (1.8 MMBF) and 9 percent of the annual allowable harvest for pinyon-juniper (3,535 cords) on public land in the resource area.

*Conclusion:* Wilderness designation of the entire WSA (15,000 acres) would remove 137 acres of productive forest land (.65 MMBF of timber) and 1,048 acres of productive woodland (14,250 cords of fuelwood) from the current allowable harvest base. This would result in a loss of 8,000 board feet of timber (2 acres) and 300 cords of fuelwood (22 acres annually). While these figures appear significant for the Resource Area, they become very insignificant when compared to the allowable harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.

### Recreational Opportunities and Use

Wilderness designation would maintain nonmotorized recreation uses such as hunting, backpacking, and hiking (currently about 500 visits) but would prohibit motorized use (currently about 200 visits). The adverse impact to ORV use would be low because of the existing ORV closure on two-thirds of the area (9,852 acres) and the low amount of use.

The natural setting in the Bull Gulch Recreation Management Area (9,852 acres) would be maintained. The setting on the remaining 5,148 acres would be changed from one which generally appears to be natural but contains evidence of other activities and uses to a more natural setting. This change would have a negligible effect on recreational opportunities. A study (*Brown 1981*) of setting preferences for various activities, specific to the Glenwood Springs Resource Area, indicated a high overall preference for natural settings but that preferences for many activities were nearly equal for settings ranging from natural environments to those that are roaded and contain moderate evidence of other activities and uses. This study also indicates that changes of individual settings are generally less important than maintaining a variety of settings.

Use levels for activities other than ORV use, totaling about 500 visits annually are expected to remain at current levels.

*Conclusion:* Recreation settings and nonmotorized uses would be maintained. An additional 5,148 acres would be closed to ORV use, resulting in a loss of 200 ORV visits annually within the WSA. The impacts of shifting this use to other public lands would be negligible. Use levels for all other activities, totalling about 500 visits annually, are expected to remain at current levels unless additional access can be acquired.

### Wilderness Values

Wilderness designation of the entire WSA (15,000 acres) would have short-term and long-term benefits to wilderness values by providing statutory protection. Wilderness designation of 10,414 acres in the northern two-thirds of the WSA would have short and long-term benefit to wilderness values by providing statutory protection of the area's high quality naturalness, ecological diversity, scenic and geologic values, and deep canyons and gulches which provide outstanding opportunities for solitude and primitive recreation. Opportunities would be provided to use the WSA as a scientific benchmark to study undisturbed natural processes. Although no development is expected, wilderness preservation would not be assured on 636 acres of the suitable acreage because of state owned minerals.

Mineral leasing could continue on the 636 acres of state-owned minerals in the east central portion of the WSA at the State's discretion. Such leasing could cause a loss of naturalness because of the rights for access and development tied to such leases. Although restrictions would be imposed on any proposed development activities to protect wilderness values, these restrictions might not completely mitigate the impairment of wilderness values. However, no development is anticipated because of the low potential for all minerals. In addition, this is considered to be a short-term problem as the State has expressed a



## CHAPTER 4

willingness to exchange mineral estates in BLM wildernesses. Following acquisition by the federal government, this acreage would also be withdrawn from mineral entry.

*Conclusion:* Wilderness designation would provide long-term statutory protection. Preservation of all wilderness values would be assured on 14,364 acres and is anticipated on the remaining 636 acres of the WSA because development of state-owned minerals is not expected to occur.

### NO WILDERNESS ALTERNATIVE

#### (NO ACTION ALTERNATIVE)

Acres recommended suitable — 0  
Acres recommended unsuitable — 15,000

##### Erosion and Sedimentation

Timber harvesting and vegetation manipulation in this alternative would be located in that part of the WSA described as the unsuitable portion in the Proposed Action. Therefore, impacts on erosion and sedimentation rates from these activities would be the same as those described in the Proposed Action.

##### Energy and Mineral Exploration and Development

Energy and mineral exploration development would not be affected because potential energy and mineral resources would be available for development subject to existing restrictions. Exploration and development of locatable mineral resources would be allowed throughout the WSA subject to surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Oil and gas leasing on 9,894 acres would be allowed subject to the existing no surface facilities stipulation. Oil and gas leasing on 950 acres would be allowed subject to the existing seasonal restrictions to all leases. The 636 acres of state-owned minerals would continue to be open to leasing at the State's discretion. No exploration or development are anticipated because the development potential is low for all minerals including oil and gas.

*Conclusion:* Potential energy and mineral resources would be available for development. No exploration or development are anticipated because of the low potential for all minerals including oil and gas.

##### Big Game Habitat and Populations

Because management of big game habitat in this alternative would be the same as described under the Proposed Action, the impacts on big game habitat and populations would be the same as described under the Proposed Action.

##### Timber Production

Because management of woodlands and forest lands in this alternative would be the same as described under the Proposed Action, the impacts on timber production would be the same as described under the Proposed Action.

##### Recreational Opportunities and Use

The impacts on recreational opportunities and use would be the same as described under the Proposed Action. Although 562 acres closed to ORV use under the Proposed Action would remain open to such use in this alternative, no use is presently occurring nor anticipated in the affected area.

##### Wilderness Values

Existing management restrictions, including the no surface facilities stipulation on oil and gas leasing, an ORV closure, exclusion of timber management, and an unsuitable classification for utility and communication facilities in the Bull Gulch Recreation Management Area are expected to provide long-term administrative protection of wilderness values and supplemental values on 7,954 acres of the WSA. This area includes the interior of the WSA which retains a very high quality of naturalness, the deep canyons and gulches that provide numerous opportunities for outstanding solitude and primitive recreation and significant ecological values. No developments are planned or anticipated within this area that would adversely affect wilderness values.

Although no development is anticipated, the potential for mineral exploration and development on 636 acres of state-owned mineral lands in the east central portion of the WSA could adversely affect wilderness values. Mineral leasing could continue on the 636 acres of state-owned minerals at the State's discretion. Mineral development of this area could cause a loss of naturalness because of the rights for access and development tied to such leases. However, no development is anticipated because of the low potential for all minerals. Because the State-owned minerals are located on the boundary of the WSA, development activities would not affect the remainder of the WSA.

Forest and woodland harvesting, road building and vegetative manipulation in the southern one-third of the WSA characterized by tree and shrub-covered mountain



## ENVIRONMENTAL CONSEQUENCES

slopes, gullies, and rocky outcrops and along its northeastern boundary with its spruce-fir forests and gentle slopes would impair naturalness on about 1,798 acres over the long term. Timber harvesting would be concentrated along the northeastern boundary of the WSA. Woodland harvesting and vegetation manipulation would occur in tracts scattered throughout the southern one-third of the WSA. Topographic and vegetative screening would minimize any impacts from these activities on the balance of the WSA.

The absence of statutory and administrative protection on 2,788 acres primarily located in the southern portion of the WSA would result in impairment of its wilderness values. Uses incompatible with wilderness protection would be allowed. The overall effect would be the loss of wilderness values on 4,586 acres in the southern one-third and northeast boundary area of the WSA.

Localized shifts in types of recreational use would occur on those areas where continued ORV use, timber and woodland harvesting, road building, and vegetation manipulation would take place. ORV use which currently has 200 visits annually throughout the WSA would tend to concentrate more in these disturbed areas primarily due to improved access. Currently, hiking and camping use in the WSA is about 100 visits annually. Any primitive recreation activities occurring within disturbed areas would shift to the undisturbed portions of the WSA. This effect would be very localized in denser stands of timber or heavy brush. More displacement of primitive recreation would occur in open stands of aspen or sagebrush. Although use locations would shift, overall use would not be expected to increase significantly because of limited access to the WSA.

*Conclusion:* Wilderness values would not receive statutory protection. However, no short term loss of wilderness values is expected on 10,414 acres because of existing restrictive management (e.g., mineral leasing restrictions, ORV closure) and lack of development potential. The overall effect would be the loss of wilderness values on 4,586 acres in the southern one-third and northeast boundary area of the WSA.

### CASTLE PEAK WILDERNESS STUDY AREA (CO-070-433)

#### PROPOSED ACTION (NO WILDERNESS ALTERNATIVE)

Acres recommended suitable — 0

Acres recommended unsuitable — 11,940

#### Erosion and Sedimentation

Timber harvesting in productive forest land would affect erosion and sedimentation rates. The short- and long-term effects for typical sites where timber harvesting would occur are shown in Table 4-2.

Table 4-2.  
Expected Erosion and Sedimentation from Timber Harvesting -  
Castle Peak Wilderness Study Area (in tons per acre per year)

Site Type (Vegetation/ Percent Slope)	Treatment Method	Present		Short-Term <sup>1</sup>		Long-Term <sup>2</sup>	
		Erosion	Sedimentation	Erosion	Sedimentation	Erosion	Sedimentation
Mixed Conifer	Selective Cutting	0.6	1.1	2.3	4.5	0.6	1.1
Forest- 25% Slope	Clear- Cutting	0.6	1.1	3.4	6.8	0.6	1.1
Aspen Forest- 25% Slope	Clear- cutting	0.6	1.1	3.4	6.8	0.6	1.1

<sup>1</sup> One year after treatment

<sup>2</sup> Ten years after treatment



## CHAPTER 4

Since the primary effect of changes in erosion would be changes in sedimentation, only the effects on sedimentation will be discussed. As shown in Table 3-1, the WSA is in four watersheds. Under the *Northwest Colorado Council of Governments 208 Plan*, the threshold increases in sedimentation over existing sediment yields are 15 percent for the Milk Creek watershed (1,450 tons per year) and 25 percent for the other three watersheds (Alkali Creek - 5,670 tons per year, Big Alkali Creek - 4,680 tons per year, and Eagle River- 18,625 tons per year).

In the short-term, timber harvesting would cause initial increases in sedimentation. Under a worst-case situation in which all harvesting in a given year would occur in the Milk Creek watershed and timber would be clearcut, the average annual harvest on 105 acres would increase sedimentation by an estimated 357 tons in the first year (see Table 4-2), about 25 percent of the threshold level change. Sedimentation would decline rapidly in the following two to three years as new vegetation became established and would decline more slowly thereafter. By the tenth year, the restored ground cover conditions on harvest areas would be expected to return sedimentation to current levels. Thus, the increases in erosion would not be considered significant in the 208 Plan.

Road construction to access timber sales are expected to have a negligible impact on sedimentation because of the small acreage affected and because roads would be constructed in conformance with BLM road standards that are designed to minimize erosion. Assuming an average width of disturbance of 25 feet, approximately three acres would be disturbed per mile of road. The five to ten miles of road that would be constructed to access all sale areas would disturb only fifteen to thirty acres. Actions dictated by the BLM road standards, including revegetation of cut and fill slopes, and stabilization of road surfaces by installation of culverts, ditches, and waterbars to control water movement would reduce potential runoff and erosion. Sedimentation from road construction would, therefore, be negligible and is not included in the 357 tons referenced above.

In the worst case situation, the combined sedimentation from cutting 105 additional acres of timber each year could approach the threshold levels in the 208 Plan of 1450 tons per year on a cumulative basis if continued for several years. Timber sales would be deferred if their sedimentation rates were projected to exceed threshold levels.

**Conclusion:** Timber harvesting on an average of 105 acres disturbed per year would cause short-term increases in erosion and sedimentation rates, but would not be expected to exceed the threshold levels given in the 208 Plan. In the long-term, rates would decline to, or below, existing levels.

### Energy and Mineral Exploration and Development

No exploration or development is anticipated because the potential for all minerals including oil and gas is low. Energy and mineral exploration and development would not be affected because potential energy and mineral resources would be available for development subject to existing restrictions. Exploration and development of locatable mineral resources would be allowed subject to the surface management regulations that are designed to prevent unnecessary and undue degradation of the environment and require reasonable reclamation of disturbance resulting from mining activities. Oil and gas leasing on 7,660 acres would be allowed subject to the existing seasonal restrictions. In the remaining 4,280 acres of the WSA, exploration and development of leasable minerals would be allowed subject to the standard stipulations attached to all leases.

**Conclusion:** Potential energy and mineral resources would be available for development. No exploration or development are anticipated because of the low potential for all minerals including oil and gas.

### Aquatic Habitat and Populations

Aquatic habitat improvement projects would be implemented on Castle, Norman, and Catamount Creeks and Edges Lake to benefit the fisheries. A total of 5.8 miles of streams and 3 acres of Edges Lake would be improved which represents about nine percent of the stream mileage and half of the lake acreage proposed for improvement on public land in the Glenwood Springs Resource Area. The projects are expected to include instream structures, streambank or shoreline structures, and streambank and shoreline plantings. The instream structures would increase the number of riffles and pools, improve the quality of riffles and pools, and enhance the pool to riffle ratio. The streamside structures and plantings would increase stream and lakeside canopies, increase bank cover, reduce the percent of bare ground, and improve bank stability. The overall effects would be improvement of aquatic conditions with an associated improvement in fish condition, productivity, and longevity.

Aquatic habitat quality could be reduced from habitat improvement projects in the short term through increased sediment levels. However, once the increased sediment levels are reduced, the stream habitat will return to pre-disturbance levels within 1-5 years. The long-term net effect would be expected to result in improved habitat.

The estimated sedimentation and total suspended solids from other resource activities in the perennial streams under a worst case situation could have a major but short-lived impact on the existing fisheries in Castle, Norman, and Catamount Creeks. The degree of impact would depend on a number of factors including the location of disturbance



## ENVIRONMENTAL CONSEQUENCES

relative to percent slope, aspect, vegetative cover, resident soil profiles, annual weather patterns, rate of disturbance, and pre-existing water quality.

The estimated sedimentation described under the erosion and sedimentation section could have a major but temporary impact on Castle Creek for example. The increased sedimentation would decrease pore space in the stream bed rubble and therefore reduce existing stream invertebrate populations. The increased suspended solids would decrease ambient light and reduce stream algae. This would reduce the food base for fish as well as reducing spawning success.

According to Ward and Gray (1975), once the disturbance stabilizes and stream sedimentation is reduced, the stream would rapidly heal itself. This is especially true where stream gradients are high. The stream bed sediments would be rapidly scoured out. The invertebrate and algae communities would rapidly reestablish their former species diversity and populations. This would enable the trout species to increase spawning and survival and return to former densities. This would be expected to occur in most cases within one to five years.

Management stipulations, restricting surface-disturbing activities near streams and allowing equipment to cross streams only at designated or constructed crossings with culverts or bridges designed to allow migration of fish, would prevent degradation of aquatic habitat.

*Conclusion:* Impacts from timber harvesting and construction of aquatic habitat improvement projects would cause major but short-lived impacts on fisheries. However, over the long term, habitat improvements on 5.8 miles of streams and one lake (3 acres) would improve aquatic habitat conditions and increase fish productivity.

### Big Game Habitat and Populations

Projected populations of 1,225 deer and 375 elk and existing summer range for both species would be maintained. Timber harvesting would have short-term adverse impacts on the projected populations of 1,225 deer and 375 elk including temporary loss of forage, thermal and hiding cover, and solitude and displacement of animals to other portions of the WSA during harvest periods. The overall impact would be negligible because of the small amount of acreage affected annually in the WSA (an average of 105 acres or 0.9 percent of the WSA) and because there would be sufficient area and forage in the remainder of the WSA to absorb the displaced animals. In addition, the required management stipulations adopted in the RMP for timber harvesting restrict the size and design of harvest areas and provide for retention of hiding cover adjacent to harvest areas.

Elk calving and deer fawning areas would be protected. The required management stipulations for timber harvesting preclude timber harvesting in elk calving areas, establish buffer zones around elk calving areas, and preclude timber harvesting in the buffer zones and in deer fawning areas during calving and fawning periods. In addition, the seasonal restriction on oil and gas development activities, the ORV restriction limiting such use to designated roads and trails, and the sensitive classification for utility and communication facilities would prevent habitat disruption during elk calving and deer fawning periods.

*Conclusion:* Projected populations of 1,225 deer and 375 elk would be maintained in the long-term. Timber harvesting would cause minor temporary habitat disruption and displacement of big game to other portions of the WSA.

### Timber Production

Timber production and harvesting would be allowed on forest land in the current allowable harvest base. Approximately 9,450 acres of productive forest land would be managed and a total of 59 MMBF of timber would be available for commercial harvesting. This acreage represents 22 percent of the productive forest land and 56 percent of the total spruce-fir volume in the Glenwood Springs Resource Area. On a sustained yield basis, an average of 105 acres with a volume of 0.66 MMBF would be harvested annually. This harvest level would represent about 37 percent of the annual allowable harvest level (1.8 MMBF) for productive forest land on public land in the Resource Area. While these figures appear significant for the Resource Area, they become very insignificant when compared to the annual allowable harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.

In the long term, the timber in the WSA would be brought into a more productive, regulated condition through the application of timber harvests, thinnings, and other intensive forest management practices. Harvesting of dead, diseased, and overaged trees would improve the health and vigor of the forest stands and reduce mortality, decay, and susceptibility to insects and disease. Removal of the dead timber would also reduce the heavy fuel load and potential major wildfire situation.

*Conclusion:* Timber production would be allowed on forest land in the current allowable harvest base. The annual sustained yield would be 0.66 MMBF of timber.



## CHAPTER 4

### Recreational Opportunities and Use

Recreational opportunities and settings would not be significantly affected in the WSA. All existing opportunities, including recreational ORV use, would continue to be available. Although timber harvesting, road building, and continued ORV use could cause localized reductions of nonmotorized recreation opportunities (current use about 25 camping/hiking visits), the overall effect would be negligible because these actions occur only on the small amount of acreage affected annually in the WSA (an average of 105 acres or 0.9 percent of the WSA) and the low amount of use.

These changes in recreational settings would have a negligible effect on recreational opportunities. A study (Brown 1981) of setting preferences for various activities, specific to the Glenwood Springs Resource Area, indicated a high overall preference for natural setting but that preferences for many activities, such as hunting, were nearly equal for settings ranging from natural environments to those that are roaded and contain moderate evidence of other activities and uses. This study also indicates that changes of individual settings are generally less important than maintaining a variety of settings.

Recreational ORV use except for snowmobile use, would continue to be limited to the existing 2.5 miles of designated routes. Roads constructed for timber harvesting would be evaluated on a case-by-case basis to determine if they should be open to public use following harvesting. At this time, it is estimated less than two miles of additional roads would remain open. Thus, ORV use opportunities would not be expanded significantly.

Use levels, totalling about 2,050 visits per year, are expected to remain at current levels.

*Conclusion:* Recreation settings and uses would be maintained in the WSA. Use levels, totaling about 2,050 visits annually, are expected to remain at current levels. Localized displacement of nonmotorized primitive recreation (about 25 user days annually) would occur.

### Wilderness Values

Nondesignation of the WSA would have both short and long-term adverse impacts on wilderness values, including its highly natural, rolling, expensive, mountain top with its forest stands of aspen, spruce-fir, and Douglas-fir, open meadows and many water features. Outstanding opportunities for solitude and primitive recreation would also be impacted. Timber harvesting and road building to provide access to sales in the productive stands of aspen, spruce-fir and Douglas-fir distributed throughout the WSA would result in the loss of naturalness on about 105 acres per year in the densely forested portions of the WSA. This would

result in a potential long term impact on naturalness of 9,450 acres or 80 percent of the WSA.

Timber harvesting, road building, and continued ORV activity would result in localized losses of outstanding primitive recreation opportunities (current use about 25 camping/hiking visits). Outstanding opportunities for solitude would also decrease. In the denser stands of spruce and fir, the reductions in opportunities for primitive recreation use and solitude would be more localized while in open stands of aspen, the losses would be more widespread.

In addition, the absence of statutory protection could result in the potential loss of naturalness on 2,490 acres the areas not suitable for timber harvesting because other uses such as range or wildlife projects could be allowed that may be incompatible with the protection of wilderness values.

*Conclusion:* The overall effect would be the loss of wilderness characteristics throughout the WSA because of the widespread distribution of impacts from timber harvesting.

## ALL WILDERNESS ALTERNATIVE

Acres recommended suitable — 11,940

Acres recommended unsuitable — 0

### Erosion and Sedimentation

Wilderness designation of the entire WSA (11,940 acres) would prevent increases in erosion by precluding surface-disturbing activities, including timber harvesting.

*Conclusion:* Erosion and sedimentation levels would remain at or near current levels.

### Energy and Mineral Development

Exploration and development on 11,940 acres would be prohibited. Based on the identified absence of locatable or salable minerals, wilderness designation would have no adverse impacts on these minerals. Because of the identified low potential and the low probability that exploration or development would occur, wilderness designation would not have a significant impact on leasable minerals.

*Conclusion:* Exploration and development for mineral resources would be prohibited on 11,940 acres. Because there is no development anticipated, no mineral development would be foregone.



## ENVIRONMENTAL CONSEQUENCES

### Aquatic Habitat and Populations

Aquatic habitat improvement projects would be implemented on Castle, Norman, and Catamount Creeks and Edges Lake to benefit the fisheries. A total of 5.8 miles of streams and 3 acres of Edges Lake would be improved which represents about nine percent of the stream mileage and half of the lake acreage proposed for improvement on public land in the Glenwood Springs Resource Area. The projects are expected to include instream structures, streambank or shoreline structures, and streambank and shoreline plantings. The instream structures would increase the number of riffles and pools, improve the quality of riffles and pools, and enhance the pool to riffle ratio. The streamside structures and plantings would increase stream and lakeside canopies, increase bank cover, reduce the percent of bare ground, and improve bank stability. The overall effects would be improvement of aquatic conditions with an associated improvement in fish condition, productivity, and longevity.

Aquatic habitat quality could be reduced from habitat improvement projects in the short term through increased sediment levels. However, once the increased sediment levels are reduced, the stream habitat will return to pre-disturbance levels within 1-5 years. The long-term net effect would be expected to result in improved habitat.

According to Ward and Grey (1975), once a disturbance stabilizes and stream sedimentation is reduced, the stream would rapidly heal itself. This is especially true where stream gradients are high. The stream bed sediments would be rapidly scoured out. The invertebrate and algae communities would rapidly reestablish their former species diversity and populations. This would enable the trout species to increase spawning and survival and return to former densities. This would be expected to occur in most cases within one to five years.

*Conclusion:* Aquatic habitat quality could be reduced from habitat improvement projects in the short term through increased sediment levels. Over the long-term (1-5 years), habitat improvements on 5.8 miles of streams and one lake (3 acres) would improve aquatic habitat conditions and increase fish productivity.

### Big Game Habitat and Populations

Wilderness designation of the WSA (11,940 acres) would preclude timber harvesting and prevent habitat disruption for the projected populations of 1,225 deer and 375 elk.

*Conclusion:* Projected populations of 1,225 deer and 375 elk would be maintained. Habitat disruption and displacement of big game associated with timber harvesting would not occur.

### Timber Production

Wilderness designation would preclude management and sustained yield harvesting a total of 9,450 acres of productive forest lands with a total volume of 59 MMBF of timber.

The acreage not harvested represents 22 percent of the productive forest land and 56 percent of the total spruce-fir volume in the Glenwood Springs Resource Area. The average annual harvest level of 0.66 MMBF of timber that would be removed from the allowable harvest base represents about 37 percent of the annual allowable harvest level for timber (1.8 MMBF) on public land in the resource area. While these figures appear significant for the resource area, they become very insignificant when compared to the annual allowable harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.

*Conclusion:* Wilderness designation would remove 9,450 acres of productive forest land from the allowable harvest base. 59 MMBF of productive timber with an annual sustained yield of 0.66 MMBF would be foregone. While these figures appear significant for the resource area, they become very insignificant when compared to the annual allowable harvest of 35.9 MMBF of merchantable timber on the surrounding White River National Forest.

### Recreational Opportunities and Use

Upon designation, the entire WSA (11,940 acres) would be closed to ORV use. The adverse impact would be low because of the existing ORV limitations and the relatively low use (estimated 150 visits annually) that is presently occurring. In addition, the ORV use foregone in the WSA could be absorbed in other public lands in the resource area without noticeable impacts to those lands or inconvenience to ORV enthusiasts.

Other recreational activities (i.e., hunting, backpacking, hiking) would not be affected by wilderness designation because these opportunities would continue to be available. The setting throughout the WSA would be changed from one which generally appears to be natural but contains evidence of other activities and uses to a natural setting. This change would have a negligible effect on recreational opportunities. A study (Brown 1981) of setting preferences for various activities, specific to the Glenwood Springs Resource Area, indicated a high overall preference for natural settings but that preferences for many activities, such as hunting, were nearly equal for settings ranging from natural environments to those that are roaded and contain moderate evidence of other activities and uses. This study also indicates that changes of individual settings are generally less important than maintaining a variety of settings.



## CHAPTER 4

Lack of access to the WSA is considered to be the main factor affecting visitor use. Use levels for activities other than ORV use, totalling about 1,900 visits annually, are expected to remain at current levels unless additional access can be acquired.

*Conclusion:* The existing recreational setting and nonmotorized uses would be maintained. The entire WSA would be closed to ORV use, resulting in a loss of 150 ORV visits annually within the WSA. The impacts of shifting this use to other public lands would be negligible. Use levels for all other activities, totalling about 1,900 visits annually, are expected to remain at current levels unless.

### Wilderness Values

Wilderness designation of the entire WSA (11,940 acres) including its highly natural, rolling, expansive mountain top with its forest stands of aspen, spruce-fir, Douglas-fir, and open meadows and many water features would have short-term and long-term benefits to all wilderness values by providing statutory protection. Preservation of the natural character and the opportunities for primitive and unconfined recreation would be assured throughout the WSA because of the lack of valid rights for development. Preservation of wilderness values would in turn protect the scenic values including the basaltic outcrop that appears for 10 miles around like a castle on the skyline. Opportunities would exist to use the WSA as a scientific benchmark to study natural processes.

*Conclusion:* The 11,940 acres designated as wilderness would receive long-term statutory protection and all wilderness values would be preserved.

## ADVERSE EFFECTS WHICH CANNOT BE AVOIDED

Wilderness designation of any of the WSAs, or portions thereof, would adversely affect various resources as described previously in this chapter. Because of the management commitment that would result from designation, none of these adverse impacts could be avoided.

Nondesignation of the Castle Peak WSA and 4,586 acres of the Bull Gulch WSA would result in permanent impairment of wilderness characteristics, primarily

naturalness, in these areas as described previously in this chapter. If the Eagle Mountain WSA is not designated as wilderness and if mineral exploration development or other surface-disturbing activities would occur, permanent impairment of wilderness characteristics, primarily naturalness, would result. However, a low probability exists that such development would occur.

## SHORT-TERM USE VERSUS LONG-TERM PRODUCTIVITY

Designation of any of the WSAs, or portions thereof, would protect and maintain wilderness values and current uses except for ORV use, in the long term in the designated areas. In the long term, wilderness designation would impact the potential productivity of timber resources, wildlife habitat, and motorized recreational opportunities in the Castle Peak WSA and 4,856 acres of the Bull Gulch WSA. Wilderness designation would not significantly affect long-term productivity in the Eagle Mountain WSA, Hack Lake WSA, or 9,852 acres of the Bull Gulch WSA because of the existing restrictive management identified for these areas in the Glenwood Springs Resource Management Plan and the low potential for development.

Nondesignation of any of the WSAs, or portions thereof, would represent both a short-term and long-term commitment to manage these areas for resource values and uses other than wilderness. In the Castle Peak WSA and 4,586 acres of the Bull Gulch WSA, the wilderness resource would be lost entirely in the long term.



## **IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES**

Nondesignation of the Castle Peak WSA and 4,586 acres of the Bull Gulch WSA would represent an irreversible commitment to uses other than wilderness, resulting in the loss of wilderness values.

Although wilderness designation is considered to be a permanent form of management, it would be the prerogative of Congress to revoke wilderness designation and open an area to uses other than wilderness. Thus, designation would not represent an irreversible or irretrievable commitment of any of the WSAs, or portions thereof, to wilderness management or a permanent loss of nonwilderness resources or uses.

## **NET ENERGY ANALYSIS**

A specific energy analysis was not performed for this environmental impact statement because no major actions affecting specific sites are being proposed. A meaningful net energy analysis requires that a specific action be analyzed and some preliminary engineering data be available. A site-specific energy analysis will be included in the environmental document prepared for any major site-specific actions.







# CHAPTER 5

## CONSULTATION, COORDINATION, AND PUBLIC COMMENTS







# CHAPTER 5

## DOCUMENT PREPARATION, CONSULTATION, AND COORDINATION

### DOCUMENT PREPARATION

The *Draft Environmental Impact Statement (DEIS) on the Glenwood Springs Resource Management Plan (RMP)* served as the DEIS for this document. The names and qualifications of the interdisciplinary team that prepared the DEIS and FEIS on the RMP are listed in the FEIS on the RMP.

This FEIS was also prepared by an interdisciplinary team. Table 5-1 lists the names and qualifications of these team members.

### CONSULTATION AND COORDINATION

The planning process which led to the publication of this document is explained in Chapter 1. Additional information concerning consultation and coordination follows:

#### In Preparation of the DEIS on the Glenwood Springs Resource Management Plan

During preparation of the planning documents and DEIS, federal, state, county, and local agencies were contacted to gain information and close data gaps. The Federal Land Policy and Management Act and the BLM's *Wilderness Study Policy* require that the resource management plan be as consistent as possible with existing officially adopted and approved resource-related policies, plans, and programs of other federal agencies, state agencies, and local

governments that may be affected. To determine consistency of wilderness recommendations and state and local resource-related plans, letters were sent to the planning departments of Pitkin, Eagle, and Garfield Counties; the State of Colorado; and the U. S. Forest Service requesting an official statement on those plans, policies, and programs with which wilderness recommendations should be consistent.

To keep the public informed and to solicit comments on the planning progress, newsletters were published in February 1980, August 1980, August 1981, and April 1982. Over 1,000 copies were mailed to various agencies and individuals who requested information on the RMP.

In addition to the newsletters, public workshops were held in November and December 1979 and in May 1982. The workshops in 1979 were held to give interested agencies and citizens an opportunity to voice their concerns and identify issues for consideration in the RMP. The 1982 workshops were held to present and receive comments on the Continuation of Current Management, Resource Protection, and Economic Development Alternatives for consideration in developing the Preferred Alternative.

News releases and *Federal Register* notices concerning the RMP were also published during the planning process in addition to the many news broadcasts. A notice of intent of preplanning activities for the Glenwood Springs Resource Area RMP was published on October 26, 1979 in the *Federal Register* (volume 44, number 209, pages 61663-61664).

#### In Preparation of the FEIS on the Glen- wood Springs Resource Management Plan and this Wilderness FEIS

The DEIS was filed with the Environmental Protection Agency on October 29, 1982. The notice of availability and a public hearing announcement were published on November 5, 1982 in the *Federal Register* (volume 47, number 215, page 50365). The notice announced a 90-day comment period ending February 2, 1983.



Table 5-1  
FINAL ENVIRONMENTAL IMPACT STATEMENT TEAM

Name	Position	Qualifications
Rex Wells	Team Leader, Recreation, Visual Resources, Wilderness, Off-Road Vehicles	B.S. Outdoor Recreation, BLM—9 years outdoor recreation planner
Wade Johnson	Wilderness	M.S. Recreation Resources, BLM—12 years recreation planner; Utah Navajo Development Council—2 years regional planner
Grant Loomis	Soils and Water Resources	B.A. Economics, 2 years graduate education in water resources administration, BLM—5 years hydrologist, 2 years economist; Water Resources Research Center, University of Arizona—1 year
Edward Ginouves	Energy and Minerals Resources	B.S. Mining Engineering, BLM—5 years mining engineer
Leonard Coleman	Aquatic and Terrestrial Wildlife	B.S. Wildlife and Range, BLM—10 years wildlife biologist, 2-1/2 years range conservationist
Langley E. Ligon	Vegetation and Livestock Grazing	B.S. Range Management, BLM—13 years range conservationist
James Byers	Timber Resources	B.S. Forest Management, BLM—8 years forester
William Kight	Cultural Resources	B.S. Anthropology, BLM—8 years archaeologist
James Abbott	Land Tenure, Utility and Communication Facilities	B.S. Recreation Administration, BLM—3 years realty specialist, 4 years outdoor recreation planner; USFS—1 year forestry technician
Douglas Huntington	Technical Coordinator	M.A. Planning, BLM—5 years planner; OSM—3 years reclamation specialist
Gail Petry	Clerk-Typist	B.A. Rhetoric, BLM—2 years administrative services clerk, 2 years editorial clerk
Michele Earl	Editorial Clerk-Typist	BLM—1 year administrative clerk, 3 years purchasing/property clerk, 2 years clerk/typist
Linda Longenecker	Clerk-Typist	3 years of undergraduate work toward B.A.; BLM—3 years clerk typist; Department of Energy—2-1/2 years Clerk
Madeleine Weiss	Clerk-Typist	BLM—3 years secretary; National Park Service—1 year secretary.
Linda Cerise	Clerk-Typist	BLM—3-1/2 years editorial clerk, 2 years purchasing agent/contract specialist; DHEW—1 year secretary; U.S. Forest Service—4 years resource clerk/district clerk



## DOCUMENT PREPARATION, CONSULTATION, AND COORDINATION

Over 500 copies of the DEIS were mailed to federal, state, and local governments; private groups and organizations; and individuals for review and comment. News releases provided information on how to obtain copies of the DEIS and where to review it. Formal public hearings were held in Glenwood Springs, Grand Junction, and Denver on December 7, 8, and 14, respectively. A BLM official presided over each hearing, and three BLM representatives served on the panel. A court reporter recorded the hearings verbatim.

Comments on the DEIS were requested from the following agencies and interest groups. Those who responded are indicated by asterisks. Those responses which included wilderness-related information or opinions are indicated by double asterisks. The index number assigned to each respondent is shown in Table 5-3.

### Federal Agencies

Department of the Interior  
Bureau of Reclamation  
Fish and Wildlife Service\*  
Geological Survey  
National Park Service\*\*  
Office of Surface Mining  
Department of Agriculture  
Forest Service\*\*  
Soil Conservation Service  
Department of Energy  
Environmental Protection Agency\*\*  
Department of Transportation  
Federal Highway Administration\*

### Colorado State Agencies

Colorado Division of Planning-State Clearinghouse  
(Distributes to all State Agencies, responding agencies listed below)  
Department of Natural Resources\*\*  
Colorado Geological Survey\*  
Division of Parks and Outdoor Recreation\*  
Division of Wildlife\*\*  
Office of the State Engineer\*\*  
State Historic Preservation Officer\*\*  
Colorado Natural Areas Program\*

### Local Government

Associated Governments of Northwestern Colorado  
Eagle\*\*, Garfield\*\*, Mesa, Pitkin\*\*, Rio Blanco, and Routt  
Counties Commissioners and Planning Departments

Cities and Towns of Aspen, Basalt, Carbondale\*, Debeque, Eagle, Glenwood Springs\*, Gypsum, New Castle, Rifle, Parachute, Silt, and Snowmass Village

### Other Organizations

Advisory Council on Historic Preservation  
Aspen Board of Realtors  
American Petroleum Institute  
Club 20  
Colorado Association of Soil Conservation Districts  
Colorado Association of 4-Wheel Drive Clubs  
Colorado Cattlemen's Association\*\*  
Colorado Dude and Guest Ranch Association  
Colorado Farm Bureau  
Colorado Guides and Outfitters Association  
Colorado Mining Association\*  
Colorado Open Space Council\*\*  
Colorado School of Mines  
Colorado State University  
Colorado Wool Growers Association  
Friends of the Earth\*\*  
Independent Petroleum Association of Mountain States  
League of Women Voters  
Minerals Exploration Coalition\*\*  
National Audubon Society  
National Wildlife Federation\*  
Natural Resources Defense Council\*\*  
Public Service Company of Colorado\*  
Rocky Mountain Oil and Gas Association  
Sierra Club\*\*  
Trout Unlimited  
University of Colorado  
Upper Colorado Board of Realtors  
Western Slope Snowmobile Club  
Wilderness Society\*\*  
Wildlife Management Institute\*

The FEIS on the RMP was filed with the Environmental Protection Agency on June 14, 1983. The notice of availability was published on June 23, 1983 in the *Federal Register* (volume 48, number 122, page 28742). This notice announced a 30-day protest period which ended on July 23, 1983.

The Record of Decision for the RMP was signed by the BLM Colorado State Director in January 1984. The notice of availability was published on January 17, 1984, in the *Federal Register* (volume 49, number 11, pages 2026-2027).



## CHAPTER 5

### In Preparation of this Wilderness FEIS

During the preparation of this FEIS, federal, state, and local agencies were contacted to verify and update information concerning each WSA. This information has been incorporated into this FEIS. Additional consultation and coordination occurred with the U. S. Fish and Wildlife Service, Federal Energy Regulatory Commission, and the State Historic Preservation Officer. Responses from these agencies are included in this chapter.

The U. S. Geologic Survey and U. S. Bureau of Mines have completed the mineral surveys for the areas recommended preliminarily suitable in the DEIS. The BLM prepared similar reports for the areas recommended nonsuitable in the DEIS. This information has been incorporated into this FEIS.

## RELATIONSHIP TO OTHER DOCUMENTS

This FEIS was prepared within the context of the BLM wilderness inventory completed in 1980 and the Glenwood Springs RMP completed in 1984. The associated documents that relate to this FEIS are described below and are referenced in the text.

*Wilderness Inventory Handbook-Policy, Direction, Procedures and Guidance for Conducting Wilderness Inventory of the Public Lands*-September 27, 1978

This handbook contains the policy, direction, procedures, and guidance for conducting wilderness inventory on the public lands.

*Interim Management Policy and Guidelines for Lands Under Wilderness Review*-December 12, 1979

The interim management policy describes the interim management of WSAs and applies only during the time an area is under wilderness review and until Congress acts on WSAs.

BLM: *Initial Wilderness Inventory-Final*-August 1979

During the initial inventory, public lands administered by the BLM which clearly and obviously lacked wilderness characteristics were identified and after public review were dropped from further wilderness review. Existing in office information such as maps and aerial photos as well as public input were used to make this determination. Three criteria were required for an area to be recommended for more

intensive inventory. An area had to be (1) at least 5,000 acres in size or contiguous to a proposed or existing wilderness, (2) roadless in character, and (3) substantially free of man's imprints.

BLM: *Intensive Wilderness Inventory-Proposed Wilderness Study Areas*-February 1980

This report documented the intensive inventory. Field surveys were conducted and areas were examined for wilderness qualities listed in the Wilderness Act: Outstanding opportunities for solitude or primitive and unconfined recreation, naturalness, and the presence of supplemental values. Areas having these characteristics were identified as proposed WSAs. A 90-day public comment period followed publication of this notice.

BLM: *Intensive Wilderness Inventory-Final Wilderness Study Areas*-November 1980

This document contains the same information as the Proposed Wilderness Study Areas report, except this document includes a thorough analysis and evaluation of public comments on the proposals and any changes to the WSA recommendations made as a result of public comment. This document represents the completion of the wilderness inventory.

*Wilderness Study Policy*-February 3, 1982

This document describes the policies, criteria, and guidelines for conducting wilderness studies on public lands.

*Wilderness Management Policy*-September 1981

This document describes how BLM will manage public lands that are designated by Congress as part of the National Wilderness Preservation System.

*Glenwood Springs Resource Management Plan*

The RMP is the land use master plan that identifies the management priorities of the public lands in the Glenwood Springs Resource Area. The RMP was completed in January 1984. All of the wilderness-related documents are available for review at any BLM office. The Glenwood Springs RMP can be reviewed at the BLM offices in Glenwood Springs and Grand Junction.



## DOCUMENT PREPARATION, CONSULTATION, AND COORDINATION

### PUBLIC COMMENTS

### Comments and Responses

#### Analysis and Review Procedures

A total of 135 interested citizens, federal, state, and local agencies, and private organizations submitted comments on the *Draft Environmental Impact Statement (DEIS) on the Glenwood Springs Resource Management Plan (RMP)*. Comments were in the form of letters, or oral testimony presented at the public hearings in Glenwood Springs, Grand Junction, and Denver. Sixty-three percent or 105 of the total comments received included information and opinions relating to the Wilderness Study Areas and the preliminary suitability or nonsuitability recommendations in the DEIS.

To aid in understanding the context in which the comments were made, the preliminary suitability recommendations from the DEIS are shown in Table 5-2. A total of 340 acres were recommended preliminarily suitable for wilderness. Bull Gulch WSA was recommended nonsuitable for wilderness in the DEIS. Current acreages recommended suitable for wilderness in the FEIS are also shown for comparison in Table 5-2. The reasons for changes are explained in Chapter I.

All written comments and the hearing transcripts were sent with the Final Environmental Impact Statement (FEIS) on the RMP to the Secretary of the Interior and the Environmental Protection Agency. Only wilderness-related comments and the hearing transcripts will be sent with this FEIS to the Secretary of the Interior and the Environmental Protection Agency. All comments are available for inspection at the Glenwood Springs Resource Area and Grand Junction District offices.

All comments were reviewed and considered. Comments that presented new data, questioned facts or analyses, or raised questions or issues bearing directly upon the alternatives or environmental analyses were responded to in this final EIS. In many instances, the same concern or information was expressed by more than one contributor. In these cases, the comment printed is the one which was considered to most accurately represent the concerns of all contributors.

Twenty-three letters or oral testimonies were received that were general endorsements for designation of the Bull Gulch and Castle Peak WSA's to be recommended preliminarily suitable for wilderness. Due to the general nature of these comments and the receipt of specific comments on similar recommendations, only a representative sample of these general comments were included in Chapter 5.

Hearing commenters expressed a variety of concerns on wilderness suitability and nonsuitability of the Hack Lake, Bull Gulch and Castle Peak WSA's. Similar concerns were also expressed in the written comments included in this FEIS and therefore the oral comments are not repeated. Table 5-3 lists the contributors whose comments contained wilderness-related information and opinions. These are representative of all the 135 comments received. Table 5-3 is arranged in the order of federal agencies, state agencies, local agencies, and other organizations and individuals.

Table 5-2.  
Comparison of Wilderness Suitability Recommendations  
Between Draft EIS and Final EIS

Wilderness Study Areas	Draft EIS		Final EIS	
	Suitable	Nonsuitable	Suitable	Nonsuitable
Eagle Mountain	330	0	330	0
Hack Lake	10	0	10	0
Bull Gulch	0	15,000	10,414	4,586
Castle Peak	0	11,940	0	11,940
Total	340	26,940	10,754	16,526



## CHAPTER 5

The written public comments concerned with wilderness are presented in the left column following Table 5-3. The index numbers in the upper right hand corner of each comment corresponds with the index number shown in Table 5-3. Comments with responses are identified by vertical lines and consecutive numbers in the left margins of the letters. Only comments concerning wilderness have been answered except in those situations where the comment and response added to the impact analysis. Response to these comments are shown in the right hand column and are numbered to correspond with the comments.



Table 5-3.  
LIST OF CONTRIBUTORS

Index Number	Page	Individual, Group, or Agency
<b>Federal Agencies</b>		
1	5-8	USDI Fish and Wildlife Service, Area Office, Colorado-Utah, Salt Lake City, Utah
2	5-9	USDI Fish and Wildlife Service, Endangered Species Office, Grand Junction, Colorado
3	5-9	USDI National Park Service, Rocky Mountain Regional Office, Denver, Colorado
4	5-10	U.S. Department of Transportation, Federal Highway Administration, Region 8, Colorado Division, Denver, Colorado
5*	5-11	USDA Forest Service, White River National Forest, Aspen Ranger District, Aspen, Colorado
6	5-12	USDA Forest Service, White River National Forest, Glenwood Springs, Colorado
7	5-12	U. S. Environmental Protection Agency, Region VIII, Denver, Colorado
8 <sup>o</sup>	5-14	Federal Energy Regulatory Commission, Washington, D.C.
<b>State Agencies</b>		
9*	5-15	Colorado Natural Areas Program, Department of Natural Resources, Denver, Colorado
10*	5-17	Colorado Natural Areas Program, Department of Natural Resources, Denver, Colorado
11	5-18	Division of Wildlife, State of Colorado
12	5-20	Department of Natural Resources, State of Colorado
13	5-22	Office of State Engineer, Division of Water Resources, State of Colorado
14	5-23	Colorado Geological Survey, State of Colorado
15	5-23	Division of Parks and Outdoor Recreation, State of Colorado
16 <sup>o</sup>	5-24	State Historic Preservation Officer, Colorado Historical Society, Denver, Colorado (Responds to BLM letter of 2/9/87, which is included)
<b>Local Agencies</b>		
17	5-25	Pitkin County, Aspen, Colorado
18*	5-27	City of Glenwood Springs, Colorado
19*	5-28	Aspen/Pitkin Planning Office, Aspen, Colorado
20	5-30	Garfield County Board of County Commissioners, Glenwood Springs, Colorado
21*	5-31	City of Carbondale, Colorado
22	5-33	Eagle County Board of County Commissioners, Eagle, Colorado
<b>Other Organizations and Individuals</b>		
23	5-34	Howard E. Tingley, Carbondale, Colorado
24	5-39	Paul Rea, Greeley, Colorado
25	5-40	Sierra Club, Rocky Mountain Chapter, Denver, Colorado
26	5-43	Robert E. Schreiner, Jr., Englewood, Colorado
27	5-45	Benton Land and Livestock Company, Burns, Colorado
28	5-46	The Colorado River and Eagle Company, Eagle, Colorado
29	5-46	Aspen Wilderness Workshop, Inc., Aspen, Colorado
30	5-51	Jerry Craghead, Eagle, Colorado
31	5-54	Eagle County Agricultural Landowners Association, Eagle, Colorado
32	5-54	Natural Resources Defense Council, Denver, Colorado
33	5-65	Colorado Wilderness Network, Denver, Colorado
34	5-76	University of Colorado Wilderness Study Group, Boulder, Colorado
35	5-81	Colorado Cattlemen's Association, Denver, Colorado
36	5-82	Minerals Exploration Coalition, Denver, Colorado

\* Comments from federal, state, or local government agencies that do not contain wilderness-related information or opinions.

<sup>o</sup> Comment received during consultation and coordination for this Wilderness FEIS





United States Department of the Interior

FISH AND WILDLIFE SERVICE  
AREA OFFICE - COLORADO-UTAH  
1311 FEDERAL BUILDING  
125 SOUTH STATE STREET  
SALT LAKE CITY, UTAH 84138

IN REPLY REFER TO: (ES)

January 19, 1983

MEMORANDUM

TO: Area Manager  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, CO 81602

FROM: Field Supervisor  
Ecological Services

SUBJECT: Comment on DEIS - Glenwood Springs Resource Management Plan

In general, the overall document is well written and easy to understand. It adequately addresses potential impacts to fish and wildlife resources for the preferred plan and its alternatives.

The FWS believes that the DEIS does contain several significant shortcomings or biases that warrant further considered. We believe that the DEIS is unnecessarily prejudicial against wildlife. The Preferred Plan with its forage allocation, land disposal and habitat losses from private land development will result in an unacceptably large decline in existing big game populations.

In a recent survey conducted by Colorado State University, wildlife generated \$2.5 billion for the Colorado economy in 1981. Any actions by the BLM that could seriously reduce wildlife productivity and thereby its economic productivity must be done only as a last resort. With the inherent bias of the DEIS this is not the case. On Page 46 of the DEIS the BLM states that the goal of the Preferred Plan is to favor livestock grazing (active preference) over wildlife grazing (existing use). The FWS believes that livestock and wildlife must receive equal consideration in resource and forage allocations.

In addition, the FWS believes land disposal as currently planned will have serious adverse impacts to wildlife especially wintering big game. Disposal of public lands containing significant resource values, especially crucial winter range, is not well advised for the future health of big game herds. Any lands to be sold and/or exchanged should be closely coordinated with Colorado Division of Wildlife big game biologists and only with their concurrence.

RESPONSE TO COMMENTER 1

Thank you for your comments.

Page 2

A major shortcoming of the DEIS is that there is no discussion of any anticipated mitigation efforts to reduce identified environmental impacts. The National Policy Act (NEPA) requires an EIS to "include appropriate mitigation measures not already included in the proposed action or alternative" (Section 1502.14(f)). Section 1502.16(h) requires a discussion of the "means to mitigate adverse environmental impacts." Without inclusion of the means and measures needed to compensate for fish and wildlife losses associated with the proposal, the requirements of NEPA and the CEQ will not be fully met.

The FWS believes that the items presented in this memorandum need to be addressed and incorporated into the Final EIS. This memorandum does not fulfill Section 7 consultation as required by the Endangered Species Act of 1973 (16 U.S.C. 1531, et seq.). For endangered species concerns, contact the Endangered Species Team, FWS, Salt Lake City, Utah (801-524-4430).

We appreciate the opportunity to provide input to this document and if we can be of additional service, please contact our Grand Junction or Salt Lake City staff. The Grand Junction address is: 551 25 1/2 Road, Suite B-113 Independence Plaza, Grand Junction, Colorado 81501 (303-243-2778). The Salt Lake City address is: 1311 Federal Building, 125 South State Street, Salt Lake City, Utah 84138 (801-524-5637).

Thank you in advance for your cooperation.

Sincerely yours,

*[Signature]*  
Field Supervisor  
Ecological Services

cc: RO (ENV) - Denver, Colorado





IN REPLY REFER TO

## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
ENDANGERED SPECIES OFFICE  
551 25th ROAD  
INDEPENDENCE PLAZA  
SUITE 8-115  
GRAND JUNCTION, COLORADO 81505  
TELEPHONE 303-241-0563  
June 19, 1986

### MEMORANDUM

TO: James Owings, Area Manager, Glenwood Springs Resource Area,  
Bureau of Land Management, Glenwood Springs, CO

FROM: Robert E. Leachman, Acting Project Leader, U.S. Fish and Wildlife  
Service, Endangered Species Office, Grand Junction, CO

SUBJECT: Section 7 Consultation on Wilderness Portion of Glenwood Springs  
Final Environmental Impact Statement

We agree with your finding of "no effect" on threatened and endangered species in the Bull Gulch, Castle Peak, Eagle Mountain, Hack Lake Wilderness Study Areas regarding wilderness designation. Further coordination under Section 7 of the Endangered Species Act is not necessary for this particular action.

Thank you for conserving threatened and endangered species.

*Robert E. Leachman*

RECEIVED  
JUN 20 1986  
BUREAU OF LAND  
MANAGEMENT  
GLENWOOD SPRINGS, CO

RESPONSE TO COMMENTER 2

Thank you for your comments.

3



IN REPLY REFER TO  
L7619 (RMR-PC)

## United States Department of the Interior

NATIONAL PARK SERVICE  
ROCKY MOUNTAIN REGIONAL OFFICE  
655 Parker Street  
P.O. Box 25287  
Denver, Colorado 80225

JAN 26 1983

### Memorandum

TO: Area Manager, Glenwood Springs Resource Area, Bureau of Land  
Management, P.O. Box 1009, Glenwood Springs, Colorado 81602

FROM: Associate Regional Director, Planning and Resource Preservation,  
Rocky Mountain Region

SUBJECT: Review of Draft Environmental Impact Statement (EIS) for the  
Resource Management Plan, Glenwood Springs Resource Area,  
Colorado (DES-82/67)

The National Park Service has reviewed the subject draft EIS from the standpoints of jurisdiction by law and/or special expertise and has the following comments:

The National Park Service supports establishment of wilderness generally as enhancing the overall setting for recreational use and aesthetic quality. From the figures in Table 3-18, it appears that wilderness characteristics will be preserved only when they do not conflict with the alternative in question. We suggest that the final EIS contain a more detailed clarification on BLM's policy regarding wilderness selection.

Along those same lines, we note on page 33 that nomination of the Blue Hill Archeological District to the National Register of Historic Places is not included under the Continuation of Current Management Alternative. Further, page 35 states that areas of critical environmental concern (ACEC's) would not be designated under this alternative. Since there is no obvious explanation for this, we are curious as to the reason for these omissions from the current management plan and recommend that it be discussed in the final EIS.

It also appears from Table 3-19 on page 36 that Keyser and East Canyon Creeks would not be designated as ACEC's under the Preferred Alternative. There is also some question as to the status of Thompson Creek under the Preferred Alternative, with Table 3-19 indicating that it would be designated as an ACEC under that alternative and page 37 saying it would not. This seems inconsistent, and we suggest the final EIS contain a discussion on how an area could be an ACEC under one alternative and not be under another.

Table 3-28 on pages 48-59 includes analysis of a No Grazing Alternative which does not appear in any other part of this document. We believe

RESPONSE TO COMMENTER 3

Thank you for your comments.

### Response 1

The BLM's policy on wilderness studies and recommendations is contained in the BLM's Wilderness Study Policy published in the FEDERAL REGISTER, February 3, 1982.



the final EIS should thoroughly examine this alternative in the same manner as the others, or it should be eliminated from Table 3-28.

We must take issue with the unsubstantiated statement on page 46 that the general public does not consider management of cultural resources to be a major issue. If this is BLM's perception, that might explain the failure to include the nomination of the Blue Hill Archeological District to the National Register of Historic Places under the Continuation of Current Management Alternative. It might also explain why the Colorado State Historic Preservation Officer (SHPO) does not appear on the distribution list for this document on page iv. In any case, if BLM is willing to speak for the general public about cultural resources, a statement such as this one should be supplemented by evidence. If no such evidence is available, the statement should be deleted from the final environmental statement.

The Glenwood Springs Resource Area contains several potential National Natural Landmarks. They are as follows:

Earle County

Colorado River (State Bridge to Dotsero)  
Deer Creek  
Detaero Lava Flow and Volcano  
Earle River  
Gypsum Cliffs

Garfield County

Glenwood Canyon  
Glenwood Hot Springs  
Grand Hogback  
Rifle Creek Box Canyon

Project planning and implementation of a selected alternative should consider these potential designations and avoid impacts which would adversely affect the ecological and geological features of these areas. Further information on these areas can be obtained from Ms. Carole Madison, National Park Service, Rocky Mountain Region, P.O. Box 25287, Denver Federal Center, Denver, Colorado 80225 (Phone: 234-6443).

*Richard A. Strait*  
Richard A. Strait



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

REGION EIGHT

Colorado Division  
Post Office Box 25406  
555 Zang Street  
Denver, Colorado 80225

January 24, 1983

IN REPLY, REFER TO  
HPD-CO  
434

Mr. Alfred Wright  
Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, Colorado 81602

Dear Mr. Wright:

This is in response to your request for comments on the Draft Environmental Impact Statement on the "Glenwood Springs Resource Management Plan."

We have reviewed the document and have no comments.

Thank you for the opportunity to review the statement.

Sincerely yours,

*A. J. Siccardi*

A. J. Siccardi  
Division Administrator

RESPONSE TO COMMENTER 4

Thank you for your comments.





Reply to 1950

Date February 1, 1983

Mr. Al Wright, Manager  
Glenwood Springs Resource Area  
U.S. Bureau of Land Management  
P. O. Box 1009  
Glenwood Springs, CO 81602

Dear Al:

The following are comments from the Aspen Ranger District concerning your Draft Environmental Impact Statement for the Glenwood Springs Resource Area:

Page 20 "Locatable Minerals. BLM approval would not be needed if proposed operations would disturb 5 acres or less per year, but notification would be required."

Although this does not directly affect National Forest management, I have a concern that a 5 acre operation, if done improperly and in an environmentally sensitive location, could potentially be of greater significance than a larger operation done properly.

In addition, 5 acres per year can add up quickly over a period of years. The result could be a large project with considerably different impacts and effects than originally planned.

Page 30 In every alternative, you propose disposal of lands resulting in "significant adverse impact on big game through loss of crucial winter range".

In light of the shrinking winter range situation on the Western Slope, it seems land adjustment objectives should recognize the importance of maintaining "crucial" winter range acreages.

Map 3-34 This map shows all lands in the immediate Aspen area in the "Disposal" category. This would include the public parking area and city water facilities on Red Mountain on lot 22, Section 7, T10S, R94W. As we have discussed with your staff previously, we would prefer this area to remain in public ownership because it provides important winter access into Hunter Creek.



FS-6200-118-80

RESPONSE TO COMMENTER 5

Thank you for your comments.

Al Wright, Manager

2

We support your proposal to retain ownership and cooperatively manage the Capitol Guard Station area, Section 25, T9S, R86W. It provides valuable parking and access into East Sopris Creek and Hay Park.

We also support retention of the Eagle Mountain parcel in Section 34, T9S, R86W and Section 3, T10S, R86W.

You show a parcel for disposal in Sections 3, 4, and 10, T9S, R85W which we would like to see retained in public ownership. This parcel contains big game winter range, plus a road for which right-of-way should be preserved.

I trust these comments will be of value and want to stress they are meant in a constructive manner.

Thank you for the opportunity to comment. Please contact me if you need any clarification or wish to discuss any of the above comments.

Sincerely,

*Dennis E. Bschor*

DENNIS E. BSCHOR  
District Ranger

cc: Board of County Commissioners, Pitkin County  
Randy Cote, Division of Wildlife  
Mark Fuller, Pitkin County Environmental Coordinator  
Sunny Vann, Planning Director  
Forest Supervisor, White River N.F.





United States  
Department of  
Agriculture

Forest  
Service

White River  
National Forest

P.O. Box 948  
Glenwood Springs, CO 81602

6

Page: 2320

Date: February 2, 1983

Mr. Al Wright  
Area Manager  
Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, CO 81602

Dear Al:

In addition to the comments in my February 1 letter, I would like to further explain my earlier position regarding the Hack Lake Wilderness study area.

This area is not recommended for inclusion in the Flat Tops Wilderness, except for that portion above the Flat Tops Rim because of its potential for difficult manageability. Inclusion would create an area tied to the Flat Tops by two narrow strips of wilderness and essentially surrounded by non-wilderness multiple use lands. It would also create a small inholding of non-wilderness National Forest land unless the National Forest portion of the Flat Tops Wilderness were changed. This becomes apparent when the Hack Lake WSA is laid against the Flat Tops Wilderness boundary. For this reason I continue to feel that my earlier recommendation is appropriate.

This does not imply that the Hack Lake area lacks wilderness quality, and that determination was made when your study was done.

I appreciate the opportunity to comment on your draft plan.

Sincerely,

*Richard E. Woodrow*  
RICHARD E. WOODROW  
Forest Supervisor

RESPONSE TO COMMENTER 6

Thank you for your comments.



FS-6200-110 (7/81)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

1860 LINCOLN STREET

DENVER, COLORADO 80295-0699

FEB 1 1983

Ref: 8PM-EA

Alfred Wright, Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, Colorado 81602

Dear Mr. Wright:

EPA Region VIII has reviewed the draft environmental impact statement for the Glenwood Springs Resource Management Plan. Generally we have found the document to be well organized and thorough, with information presented clearly.

We have identified three areas of concern to EPA that are discussed in the attached comments. We believe that the reasons for choices of water quality management activities and wilderness recommendations need to be clarified in the Final EIS. We also think that more information is needed regarding grazing management activities and their impacts on water quality.

Based on the system EPA uses for categorizing environmental impact statements under its review, we have rated this DEIS as LO-2. This means that we do not currently have any objections to the proposed plan. We believe that additional information would improve the Final EIS and adequately explain the proposal and its environmental impact.

I hope that these comments will prove useful to your office in developing the Final EIS on this Resource Management Plan. If you need further assistance from this office, please contact Mike Gansecki of my staff (FTS 327-4831).

Sincerely yours,

*Steven J. Durham*  
Steven J. Durham  
Regional Administrator

Enclosure

7



DETAILED COMMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY ON THE  
DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE GLENWOOD SPRINGS  
RESOURCE MANAGEMENT PLAN (BLM)

1. The Draft EIS is a generally coherent and well-organized document. EPA is particularly impressed with the work that was done to define sediment runoff characteristics in various subregions of the Planning Area. Based on the system EPA uses to categorize EISs under its review, we have rated this Draft EIS as LO-2. This means that we have no objections to the project proposal; however, we believe that additional information is needed in the Final EIS. We do think that greater consideration could be given to outlining the priority areas for BLM management for all of the resources concerned. We are particularly concerned with the protection of critical watersheds, water quality problem areas, and areas of critical environmental concern.

2. Preferred Management Decisions

The EIS presents three principal alternatives for evaluation -- the continuation of current management practices, a resource protection alternative, and an economic development alternative. On page ix of the Summary, the Preferred Alternative is identified as, "including aspects of both Resource Protection and Economic Development". For the most part, preferred management decisions presented in this DEIS can be understood as BLM's best judgment regarding these options.

However, in some situations, there are preferred management decisions made that differ considerably from the evaluated alternatives. These include certain aspects of water quality management and wilderness management. EPA believes that where such a departure occurs, that the EIS should contain more explanation of how and why those decisions were reached.

a. Water Quality Management

On page 16 of the DEIS, it is noted that:

"Under Resource Protection and Economic Development Alternatives four areas shown on Map 3-1 would be monitored to identify the origins of existing water quality problems. Under the Preferred Alternative, two areas, Milk Creek and Alkali Creek basins, shown on Map 3-1 would be investigated..."

Map 3-1 is very non-specific and does not identify the watersheds or the nature of water quality problems. Under discussions of the Affected Environment, these watershed problem areas are again not defined. There is considerable discussion of salinity water quality impacts from saline seeps, ground water recharge areas, etc. We are not sure whether these are the same problem areas discussed on page 16 or not.

-2-

The Final EIS would be enhanced by identifying the four problem areas mentioned above. A more understandable rationale should also be provided as to why these areas will not be monitored for their possible origins. If the salinity-related issues are separated from the identified water quality problems, some discussion should also be included as to what the BLM can and should do relative to salinity control. The EIS should also recognize that the U.S. Bureau of Reclamation is conducting studies for possible control of some of the saline springs in the Glenwood-Dotsero area.

The local water quality management agencies may have identified high priority watersheds which contain BLM land in addition to watersheds contained in the Areas of Critical Environmental Concern and Critical Watershed Management Areas). We encourage cooperation with these agencies in prioritizing resource management actions to these areas if needed.

b. Wilderness Management and Recommendations

1 A similar incongruity between the Resource Protection/Economic Development versus the Preferred Alternative occurs with respect to Wilderness Study Area recommendations. On page 35, recommendations for suitable wilderness vary from 10,755 to 30,630 acres under the evaluated alternatives. Yet the preferred recommendation identifies only 330 acres as suitable for wilderness.

2 The Bull Gulch WSA is of particular concern. In the discussion of wilderness values on pages 80-81, the OEIS notes that Bull Gulch "is the only areas with wilderness potential in the resource area that contains a land form/ecosystem type different from that in the existing wildernesses in the local region."

One of the more important criteria for wilderness consideration includes consideration of unique or fragile lands in a wild state. The OEIS discussion dismisses this WSA from further consideration on page 46:

"The entire area was recommended as nonsuitable because other special management recommendations to protect visual, natural, and primitive recreation values were considered more appropriate for this area. This recommendation eliminates potential manageability problems that would result from wilderness management. In addition, this area would only add to the diversity of the National Wilderness Preservation System locally."

RESPONSE TO COMMENTER 7

Thank you for your comments.

Response 1

The Proposed Action in this FEIS recommends 10,754 acres as suitable for wilderness designation.

Response 2

The Bull Gulch WSA was recognized as being ecologically different from existing wildernesses locally. However, numerous other wilderness study areas in the western United States possess this same ecological characterization. The effects of designation or nondesignation on diversity in the National Wilderness Preservation System on a regional or national level cannot be determined until the studies are completed for these other areas.

The BLM's Wilderness Study Policy directs the use of Bailey-Kuchler system. The variety of vegetation and geological features within the WSA are identified as special features and the opportunities for primitive and unconfined recreation are documented in Chapter 3.



3 EPA believes that while such a decision may be justified, the EIS should spell out in greater detail the reasoning behind this decision. The Final EIS should contain a more complete description of the Bull Gulch wilderness area, its unique geological, vegetational and wildlife characteristics. The EIS should also explain the management difficulties that would occur if the area were designated as wilderness. Finally, the EIS should carefully explain the management techniques that will be proposed to protect the visual, natural and primitive recreation values and why these techniques are preferable to wilderness designation.

### 3. Grazing Management Proposals

The Preferred Alternative for Grazing Management would result in a 37 percent increase in livestock forage. While this goal is consistent within the framework of the other alternatives, EPA is concerned about the potential water quality implications. In the discussion of the Existing Environment on page 72, it is noted that only a brief survey of rangeland conditions was conducted in 1979. Only 9% of the range is above fair condition. The EIS also indicates that a trend evaluation of rangeland conditions has not yet been done, and that "indications are that substantial portions of the resource area are in static and downward trend" (p. 72).

The EIS should state the long-term range inventory staffing commitments needed to assure: 1) that consistent available forage for increased grazing actually exists, and 2) that grazing management systems are planned to result in improving condition trends. Improving condition results in numerous values in addition to livestock grazing capacity. Such a situation obviously calls for rangeland improvements such as vegetation manipulations and more intensive management controls as rest/rotation cycles, as is proposed on pages 26-27. However, it is difficult to understand how an almost immediate increase in Livestock Forage Allocation (about 3% as shown in Table 3-6), can be made. The Final EIS should explain the conditions that will allow such an approach to be implemented. Consideration should also be given to sediment runoff water quality effects that may occur because of intensive rangeland manipulation and use.

### Response 3

This detailed information was included in the technical supplement to the DEIS (pp. 43 to 6A) and is also included in this FEIS (see Chapter 3). The information in the description of the Bull Gulch WSA and its various resource values comes from inventory data collected during the development of the RMP, the wilderness inventory process, and from mineral reports prepared by the BLM, U. S. Geological Survey, and U. S. Bureau of Mines.

### FEDERAL ENERGY REGULATORY COMMISSION WASHINGTON, D.C. 20426

EPR-Colorado  
EPCO-1121

Mr. Kannon Richards  
State Director  
Bureau of Land Management  
2020 Arapahoe Street  
Denver, CO 80205

JUL 29 1986

Dear Mr. Richards:

Your letter of February 25, 1986, (BLM ref. 8250 (7-162)) concerned the Bull Gulch Wilderness Study Area in Colorado which includes approximately 2,000 acres of power site lands along the Colorado River, 15 to 24 river miles upstream from its confluence with the Eagle River.

The U.S. Geological Survey's Dotsero, 7.5 minute series, topographic map indicates that several possible sites for a high dam lie in the 9-mile reach of the Colorado River immediately above the mouth of the Eagle River. Construction of a high dam in this reach of the river would inundate most of the subject power site lands. The uppermost dam site is located just above the mouth of Sweetwater Creek. The U.S. Geological Survey has estimated that a 380-foot-high dam at this site would create a reservoir with a capacity of about 1.2 million acre-feet at a pool elevation of 6,600 feet. Such a dam would make possible the development of approximately 120,000 kilowatts of hydroelectric capacity. An even higher dam is possible.

Dam construction in this reach of the Colorado River has not received serious consideration because a main line of the Denver and Rio Grande Western Railroad traverses the reservoir area. However, the value of this site is enhanced by its large storage potential and its favorable location, 60 miles upstream from some of the richest oil shale deposits in the world. It appears that the railroad could be relocated with about 12.8 miles of new track that would follow the Piney River valley south from State Bridge about 3.6 miles, pass through a 4-mile tunnel to the Muddy Creek valley, and follow the Muddy and Alkali Creek valleys 5.2 miles to the Eagle River valley near Wolcott.

An alternative smaller 100-foot-high dam project could be developed at the same site. This smaller project would not affect the Bull Gulch Wilderness Study Area and would not necessitate the major railroad relocation referred to above. Its maximum storage would amount to about 30,000 acre-feet, which may not be adequate for power and other uses.

### RESPONSE TO COMMENTER 8

Thank you for your comments. Your information has been incorporated into this FEIS.



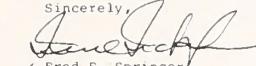
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-2-

Hydroelectric benefits alone probably would not justify reservoir development in the subject reach of the Colorado River, but such development might be needed to meet the water needs of the shale oil industry if commercial shale oil production becomes economically feasible. It is suggested that the Bureau of Land Management consider this possibility in its assessment of the Bull Gulch Wilderness Study Area.

Authority to act on this matter is delegated to the Director, Division of Project Management, Office of Hydropower Licensing, under 18 C.F.R. §375.314 (1985).

Sincerely,

  
Fred E. Springer  
Director, Division of  
Project Management

## STATE OF COLORADO

COLORADO NATURAL AREAS PROGRAM  
Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, Colorado 80203  
Phone (303) 866-3311



Richard O. Lamm  
Governor  
D. Monte Paoletti  
Executive Director  
Carol L. Postmaier, Ph.D.  
Program Director

November 29, 1982

Mr. Al Wright, Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
Post Office Box 1009  
Glenwood Springs, Colorado 81601

Dear Al:

We request your consideration of the following comments on the Glenwood Springs Resource Area DEIS submitted by the Colorado Natural Areas Program (CNAP), Colorado Department of Natural Resources.

The Program is charged by statute with identifying and protecting a sufficient array of natural areas to represent the different vegetation types and unique natural features comprising Colorado's natural heritage. Natural areas contain rare or quality examples of native plant communities, aquatic systems, geologic features, and habitat for plants and animals of special biological concern. The Program is authorized to: (1) establish a statewide registry of qualified natural areas, involving no written agreement or obligation on the part of any party; (2) designate areas on the Registry by means of voluntary agreements with public/private landowners; and (3) monitor the landowner's/manager's management and protection of designated sites.

The Program's Natural Heritage Inventory provides necessary data to identify and prioritize some of the most outstanding examples of Colorado's natural heritage. Highest priority sites are considered for the Registry by the Colorado Natural Areas Council, an advisory council appointed by the Governor. Registering a site means that the site meets the Program's scientific criteria for a natural area. Even though this step involves no legal obligation on the part of the landowner or the State, placing a site on the Registry is done only with the landowner's approval.

The Colorado Department of Natural Resources and the Bureau of Land Management have a memorandum of understanding which describes a process for the identification, registry, and designation of those areas managed by BLM which qualify as state natural areas (e.g., possess unique natural characteristics of statewide or national significance). The amended version of the MOU is currently under BLM review and is enclosed for your information.

RESPONSE TO COMMENTER 9

Thank you for your comments.



Al Wright  
November 29, 1982  
Page 2

The CNAP has identified two areas in the Glenwood Springs Resource Area which may qualify for further consideration as potential natural areas: Dotsero Crater and Eagle Valley Evaporite Formation. We are bringing them to your attention at this time because we thought it would be the best time for you to include them in your land use planning process and in the final Resource Management Plan.

Dotsero Crater.

Considerable interest has existed in this site for a long time: CNAP began investigating the site in 1978 and the site was included in the Department of the Interior's "Natural Landmarks of the Southern Rocky Mountain Region" (1980). A site evaluation form and map describing the site are enclosed for your information. Dotsero Crater and its associated lava flow represent the youngest volcano in Colorado, a state where volcanism is rare (Chronis, H. 1981. Roadside Geology). Its age is estimated at 4000 years. Dotsero Crater is 800 feet deep and one third mile wide; it represents one of the highest priority geologic features in Colorado.

We understand that there are complexities surrounding the patented mining claims on the site. We would like to attempt to clarify the existing mining claim situation before we request BLM permission to register the site. The current cinder mining operation at Dotsero Crater has already produced some impacts on the site and additional mining operations could cause additional impacts. Dave Atkins and Dave Manning of your staff have helped us to begin sorting out the mining situation at Dotsero Crater. We believe the significant and fragile geology of the site deserves some kind of management alternative which would basically preserve its integrity as a unique geologic feature.

Eagle Valley Evaporite Formation.

The Eagle Valley Evaporite Formation, a Pennsylvanian gypsum formation, is found only in Eagle County, Colorado. Enclosed is a site evaluation form and map describing the site which explains CNAP's reasons for proposing the site for further consideration as a natural area. The proposed area contains the best vegetative representation of this unusual geologic substrate.

Recommendations.

We recommend that you include both the Dotsero Crater and the Eagle Valley Evaporite Formation in your Resource Management Plan as proposed Research Natural Areas or as proposed Areas of Critical Environmental Concern. We would like to work further with your staff to determine the potential of Dotsero Crater and Eagle Valley Evaporite Formation as natural areas for the registry.

Al Wright  
November 29, 1982  
Page 3

Enclosed is some information on the Colorado Natural Areas Program (Brochure, Guidelines for Registry and Designation, Natural Areas Act, and proposed amended MOU between BLM and the Department of Natural Resources). If you need additional information on the sites or the Natural Areas Program, please call me. I am looking forward to working with you on these important sites. Thank you for your help.

Sincerely,

*Carle Pustmüller*

Carle J. Pustmüller, Ph.D.  
Program Director - Natural Areas Program

CJP:bec

Enclosures



## STATE OF COLORADO

COLORADO NATURAL AREAS PROGRAM  
Department of Natural Resources  
1313 Sherman Street, Room 718  
Denver, Colorado 80203  
Phone (303) 839-1311



Richard D. Lamm  
Governor  
D. Monte Packer  
Executive Director  
Carol J. Pustmueller, Ph.D.  
Program Director

January 13, 1983

Mr. Al Wright  
Glenwood Springs Resource Area  
Bureau of Land Management  
Glenwood Springs, Colorado 81601

Dear Al:

Thank you for your consideration of the Colorado Natural Areas Program's initial comments on the Glenwood Springs Resource Area's Resource Management Plan and Draft Environmental Impact Statement sent to you on November 29, 1982. I also had an opportunity to briefly review our requests with Dave Mensing last month when DNR was briefed by your staff. I understand the land management complexities associated with both of the proposed sites (particularly Dotsero Crater) and appreciate the potential difficulties your staff will encounter in attempting to balance competing resource management alternatives on these sites. I'll be glad to work with you on these sites to resolve as many of these potential conflicts as possible.

The following comments, which I would appreciate your including in your review of the draft RMP, are in addition to our earlier comments on specific sites and refer to three sections in the DEIS: (1) interrelationships with other programs; (2) areas of critical environmental concern; and (3) special plants (threatened, endangered, sensitive). The comments mostly suggest clarification of parts of these sections.

#### Interrelationships with Other Programs

Cooperation with the Colorado Department of Natural Resources on threatened, endangered, and sensitive plant and animal species is with the Colorado Natural Areas Program (CNAP) and the Division of Wildlife. The Colorado Natural Heritage Inventory (CNHI) was developed for CNAP under several contracts with The Nature Conservancy (TNC). All data in the CNHI are the property of the CNAP. CNHI is operated by TNC under contract with the Colorado Natural Areas Program. TNC is a private non-profit organization and not an agency of the Colorado State Government. CNHI identifies and evaluates the most outstanding examples

RESPONSE TO COMMENTER 10

Thank you for your comments.

Mr. Al Wright  
January 12, 1983  
Page Two

of Colorado's natural heritage for the Natural Areas Program. It may be useful to clarify the language on page 5 of the DEIS to accurately reflect this relationship. Specific reference in this section to the new, recently signed Memorandum of Understanding between BLM and DNR which describes a process for the identification, registration, and designation of those areas managed by BLM which qualify as state natural areas (e.g., possess unique natural characteristics of statewide or national significance) would help reviewers better understand the existing cooperative relationship between DNR and BLM.

#### Areas of Critical Environmental Concern (ACECs)

I recommend that the "objective" section for ACECs (DEIS, 36) include examples for "natural systems or processes"; for example, protection of rare plants and protection of rare or exemplary ecosystems or geologic features.

#### Special Plants

The section on threatened or endangered species (DEIS, 73) adequately describes the known listed and sensitive plant taxa in the Resource Area. However, I am concerned that the language contained in the "impacts on vegetation" section (DEIS, 120, 145, 169) -

No adverse impacts would occur to known (my emphasis) occurrences of threatened or endangered plant species from any management action that has identified a site-specific project location. Threatened, endangered, or sensitive plant species would be protected from adverse impacts of management action through activity plans and environmental assessments when specific site locations are identified.

refers only to those localities which are already known to the Resource Area. The ambiguity of the language contained in the DEIS could be clarified by describing an intention to inventory rare plant or exemplary ecosystems.

Thank you for your consideration of these comments. Please contact me if you need additional information.

Sincerely,

*Carol Pustmueller*

Carol Pustmueller, Ph.D.  
Director  
Colorado Natural Areas Program

CP/ljc



STATE OF COLORADO  
DIVISION OF WILDLIFE  
DEPARTMENT OF NATURAL RESOURCES

DATE: January 21, 1983

TO: Pete Barrows  
FROM: Perry D. Olson *PDO*  
SUBJECT: Glenwood Springs Area Resource Management Plan

I. General Comments

The Northwest Region of the Colorado Division of Wildlife (DOW) believes that big game wildlife populations in the Glenwood Springs Resource Area would suffer from implementation of the Preferred Alternative. Under this plan, current big game populations would receive a 21 percent cut in forage allocations, and while noting that a 5 percent loss of crucial big game winter range would cause a significant impact, the plan proposes to dispose of 6 percent of the total crucial big game range in the resource area. Furthermore, the expected 8 percent decline of crucial big game winter range on private land in the area magnifies the severity of the adverse impacts to big game on BLM land. We recommend that the Preferred Alternative either be modified to place greater emphasis on wildlife resources, or it be rejected.

Criteria for Selecting the Preferred Alternative

The Preferred Alternative is inconsistent with Specific Criteria No. 1 (page 47), because big game populations are projected to be 33 percent short of meeting DOW population goals.

Criteria used for selecting the Preferred Alternative in Terrestrial Habitat Management and Livestock Grazing Management (page 46) results in a detrimental situation for big game wildlife. The Preferred Alternative has allocated forage to meet active preference livestock use, but is forcing wildlife to take existing use. This is not an equitable distribution of forage as, we believe, wildlife should be considered common users of the forage. The Preferred Alternative would set the carrying capacity of the land for wildlife to existing numbers, which is below some previous density estimates. A more equitable situation is to use active preference for livestock and 1988 DOW goals as objectives. This would result in the DOW and the livestock operators taking equitable cuts when forage was limited, but conversely, would allow wildlife numbers to increase in areas where sufficient forage was available.

RESPONSE TO COMMENTER 11

Thank you for your comments.

Pete Barrows  
Glenwood Springs Area Resource Management Plan  
Page Two

Wildlife Management by Allotment

Throughout the text and tables of this statement, AUMs for wildlife are projected on an allotment basis. This implies that wildlife can be managed on an allotment basis, which is unrealistic and not feasible. The DOW manages big game on the data analysis unit, or herd unit, which may consist of one or more game management units (GMU), and are many times larger than the largest grazing allotment. The DOW will not consider making reductions on big game populations at the GMU level unless there is a 20-25 percent shortage of wildlife AUMs in an entire GMU.

Land Tenure Adjustments

Land tenure adjustments are discussed in several places in the EIS, but not always consistently. On pages 39 and 166 it is stated that the disposal of 14,730 acres, or 6 percent of the total big game crucial winter range would have significant long term effects, while on page 47, it is stated that these lands do not have important resource value. We agree with the former, and generally oppose any sale of big game crucial winter ranges on public lands. The DOW requests the opportunity to comment on individual proposed public land sales, trades, or exchanges, to assess the value of these lands for wildlife.

Land tenure adjustments in R85W,T6S at Lookout Mountain provide public access to Lookout Mountain and the disposal of this land could be inconsistent with Specific Criteria No. 7 (page 48).

Impacts on Social and Economic Conditions

The net changes for personal income and employment shown in Table 5-35 (page 175) are inconsistent with Specific Criteria No. 4 (page 47).

Based on the initial forage allocation, it is estimated there would be a net increase of \$27,758.00 of income to ranches in the resource area. At the same time it is estimated that expenditures supporting big game recreational activities would drop 3.1 million from 14.6 million dollars. This information clearly illustrates the value of wildlife to the economy of the resource area. We urge the BLM to reconsider the importance of wildlife in the resource area. Data recently developed by Colorado State University on wildlife values should be used to conduct a reanalysis of impacts to social and economic conditions.



#### SVM Methodology

The DOW has concerns for the use of this system. Attached are two letters from Len Carpenter (DOW, Wildlife Research Leader) in which he has expressed specific criticisms about problems he perceives with the SVM system.

#### Monitoring

The BLM has stated, that before any operator has to take a reduction in AIM, and intensive monitoring program will be implemented to establish the validity of the initial allocation process. The DOW requests that the same monitoring program be implemented for wildlife, and the same five year grace period be extended before we are requested to make reductions of wildlife.

#### Vegetation Manipulation

The Preferred Alternative proposed manipulating 49,240 acres of rangeland for livestock and wildlife during the next 10 years. This manipulation is supposed to result in increased forage which, in the long term, would result in only a 7 percent decrease in wildlife numbers instead of a 21 percent decrease. We are unconvinced this estimate is realistic as we believe vegetation manipulation objectives for wildlife are not always realized.

#### Forest Management

We generally recommend that all roads to timber sales be closed to the public after the sales are completed.

Firewood cutting should be restricted to specific areas during the big game seasons.

#### Areas of Critical Environmental Concern (ACEC)

This section adequately addresses the Colorado River cutthroat but does not do likewise for the razorback sucker. Based on available data it would be our recommendation that the section of the Colorado River below Rulison be designated ACEC for the razorback sucker.

#### Bighorn Sheep Introduction - Grand Hogback

The management plan discussed introduction of three wildlife species into the resource area, but did not discuss the bighorn sheep introduction on the Hogback, which is the only wildlife species for which a formal proposal has been prepared. The Hogback release site is the number one priority for bighorn sheep transplants for the Northwest Region of the DOW. We request that this proposal be accepted as part of the Preferred Alternative for the resource management plan.

## II. Specific Comments

#### Page 46, Terrestrial Habitat Management and Livestock Grazing Management Paragraph 3

What is the rationale for determining that existing use for wildlife is more realistic than DOW goals?

#### Page 47, Hack Lake

We disagree with the statement that portions of the Hack Lake Wilderness Study Area that lie below the rim of the Flat Tops were felt to be inconsistent with Congress's intent to maintain the Flat Tops Wilderness boundary above the rim. In the early 1970's Congress included the Meadows, South Fork Canyon, Patterson Creek, Wagonwheel Creek, and Trappers Lake in the Flat Tops Wilderness Area. These areas are below the rim. We feel that Hack Lake is a logical extension of the Flat Tops Wilderness Area.

#### Page 70, Big Game, Mule Deer, Paragraph 4 and Elk, Page 71, Paragraph 2

Statements are made that crucial deer and elk winter range managed by BLM will be required to support greater concentrations of deer and elk; however, under the Preferred Alternative, the allocation of wildlife AUMs by existing use per grazing allotment does not allow for increasing wildlife AUMs in allotments on winter range to meet the anticipated increased number of animals. The result will be less forage for each animal on crucial big game winter range, which could adversely affect the health and numbers of the impacted big game populations.

#### Page 84, Aquatic Wildlife Assumptions

A fourth assumption could be added to this category to state that the condition of the riparian zone influences the quality of the aquatic environment.

#### Page 163, Cumulative Impacts on Aquatic Wildlife, Paragraph 4

What is "suitable" aquatic and riparian habitat? Will riparian habitats currently in below average condition be managed to improve their condition? Such action could have beneficial effects on water quality, aquatic wildlife, terrestrial wildlife, and recreation opportunities.



Fete Barrows  
Glenwood Springs Area Resource Management Plan  
Page Five

Page 165, Impacts from Livestock Grazing Management, Paragraph 7

Utilization of forage by livestock on big game winter range should be limited to 20 percent of available forage, not 20 percent utilization of just browse species.

We would be happy to meet with the BLM to discuss these issues of our concern.

XC: R. Evans  
D. Jones, District Manager, BLM, Grand Jct.  
A. Wright, Area Manager, BLM, Glenwood Springs  
S. Bissell  
Dewitt John, DNR

PDO:sw

STATE OF COLORADO RICHARD D. LAMM, Governor  
**DEPARTMENT OF NATURAL RESOURCES**

D. MONTE PASCOE, Executive Director  
1313 Sherman St., Room 718, Denver, Colorado 80203 866-3311

January 28, 1983



Geological Survey  
Board of Land Commissioners  
Mined Land Reclamation  
Division of Mines  
Oil and Gas Conservation Commission  
Division of Parks & Outdoor Recreation  
Soil Conservation Board  
Water Conservation Board  
Division of Water Resources  
Division of Wildlife

Mr. George Francis, Director  
Bureau of Land Management  
1037 - 20th Street  
Denver, Colorado 80205

Dear George:

Congratulations on the publication of the Glenwood Springs Draft Resource Management Plan. I gather this is the first RMP to be published by the Bureau of Land Management. It is an exceptionally clear document and should set a high standard for future RMPs.

In general, the preferred alternative is a sound and balanced approach to multiple use management. There are, however, some aspects of the RMP which require some comment:

- o **Recreation.** The State Comprehensive Outdoor Recreation Plan includes more detailed recommendations than is recognized by the RMP. The discussion of consistency should be expanded. In addition, the BLM should consider the desirability of protecting the viewshed of Rifle Gap Reservoir by a finding of unsuitability for most forms of surface occupancy by coal mines.
- o **Timber.** The preferred alternative includes experimentation in increasing water yield by clearcutting of aspen stands. A cautious approach is appropriate. The projected increases in water yields are quite small, especially when compared to the fluctuations in water yield from one year to the next. The Division of Wildlife is skeptical that increased water yields will cause a significant improvement in fish habitat, because increases would come during spring runoff. In some sites, repeated aspen clearcuts might adversely impact scenic values. It may be desirable and economic to cut only old growth, and then to allow regeneration rather than try to keep the land as meadow.



Mr. George Francis  
Bureau of Land Management

January 28, 1983  
Page 2

- o Road construction. According to the RMP (p. 75), most recreationists prefer primitive settings. Yet the preferred alternative calls for increasing the mileage of roads by over 20%, to provide for more access and to allow timber cuts. The U. S. Forest Service is now preparing a plan which may call for increased roading for building more roads to cut more timber. It would be helpful if the BLM and the Forest Service could work together to assess the likely demand for timber in the area and primitive recreation in the area and plan together to minimize roading.
  - o Land sales. The RMP states that, under the preferred alternative, lands with "important resource values" would be given a "priority for exchange" rather than for sale. This is not clearly reflected in the criteria in Appendix G. It would be desirable to divide the lands for disposal into two separate categories--lands for sale and lands for exchange. This would allow the BLM to maintain adequate holdings to protect important resource values on an area-wide basis. In addition, we urge the BLM to give first preference to existing grazing permittees on any land sales.
  - o Wilderness. We strongly urge the BLM to recommend designation of Bull Gulch and of the full Hack Lake area. Bull Gulch has only subeconomic mineral values (p. 53) and is a unique natural area in this part of Colorado. Hack Lake would be a reasonable extension of the Flat Tops Wilderness; the DEIS does not indicate any serious resource conflicts. The rationale for excluding most of the area is that the Flat Tops Wilderness is entirely above the rim; however, in other parts of the Flat Tops the wilderness is below the rim, as noted in the Division of Wildlife comments. If Congress does designate Hack Lake, it would be reasonable to include the very small areas of national forest sandwiched between BLM land and the rim. But Congress has not yet considered Hack Lake, and should be given that opportunity.
- The analysis in the DEIS would be strengthened by an effort to estimate the economic benefits of wilderness designation, using an approach such as that in a recent study by Colorado State University professors, Walsh, Loomis, et. al.
- o Wildlife. In the attached comments, the Division of Wildlife raises a number of concerns about inconsistencies between the RMP and the Division's Strategic Plan. In the comments, the Division indicates a desire to meet with the BLM to work out these problems.

#### RESPONSE TO COMMENTER 12

Thank you for your comments.

#### Response 1

Use of the Walsh study was considered, but it was determined the values may not be appropriate for analyzing the four WSAs in the resource area because the Walsh study was not site-specific and because of the abundance of wilderness near the resource area and the relatively small acreage of the WSAs (see Chapter 1).

Nondesignation cannot be considered to cause an across-the-board devaluation of an area, nor does the Walsh study attempt to make that claim. Depending on the preferences of individuals, either nondesignation or designation could cause enhancement or devaluation of an area.

Mr. George Francis  
Bureau of Land Management

January 28, 1983  
Page 3

- o Presentation of the plan. The plan is well-written and relatively easy to understand. The discussion of how the preferred alternative was selected (pp. 45-48) is especially useful to a person who is trying to get an overall understanding of how the BLM proposes to manage the area. In fact, this section might be expanded slightly by including more specific comparisons in the text between the preferred alternative and other alternatives. It might also have been more useful to group environmental impacts by type rather than by alternative in the final chapter.

Sincerely yours,



D. Monte Pascoe

DMP:ak





OFFICE OF THE STATE ENGINEER  
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818  
Denver, Colorado 80203  
(303) 866-3581

January 28, 1983

TO: Dewitt John, State Clearinghouse  
FROM: Hal D. Simpson, Assistant State Engineer  
SUBJECT: Draft Environmental Impact Statement on the Glenwood Springs Resource Management Plan (DEIS).

As requested, we have reviewed the above referenced DEIS. We believe, overall, the Bureau of Land Management's (BLM) plan is clear and well balanced.

The DEIS comments that the demand for water will continue to grow and be in excess of water supply throughout the western United States. Demand for water already exceeds supply in certain areas on the western slope. For this reason, while stopping short of recommending any of the alternatives, we encourage steps which will increase the annual flows while maintaining a balance of concern for other interests.

The DEIS states that the proposed management plan includes an experiment to better estimate the increase in run-off and baseflow from aspen manipulation. We are very interested in any results obtained from this experimentation.

We commend the BLM for detailing their analysis of the impact of vegetation management and for discussing the timing of the increased flow. We would also like to see a breakdown by watershed of water yield increases.

We realize further research needs to be completed to gain a better grasp on the changes to the hydrologic system due to vegetation manipulation. We would like to comment, however, that according to Hibbert (General Technical Report RM-66) increases in flow due to aspen manipulation decline rapidly if aspen are allowed to recover the site. For example, he states that if clear-cutting is repeated every 80 years, the average annual increase over the 80 years will only be about one-third inch over the area treated. This estimate is much lower than the DEIS estimate.

1 The DEIS states that an environmental consequence of each alternative will be increased sediment yield because of the soil disturbance associated with road construction. The DEIS, further comments that additional sediment yield will reduce the useful life of the downstream dams and water diversion and retention structures. Is this impact significant? If so, what areas will be

RESPONSE TO COMMENTER 13

Thank you for your comments.

Response 1

In the Bull Gulch and Castle Peak WSAs under the All Wilderness Alternative, there would be no effect on erosion and sedimentation because timber harvesting and vegetation manipulation would be precluded. For Bull Gulch under the Proposed Action (Partial Wilderness) and the No Wilderness Alternatives, timber harvesting and vegetation manipulation on an average of 105 acres per year would cause localized short-term increases in erosion and sedimentation rates of up to 200 tons per year. In the long-term, rates would be at, or below, existing levels. For Castle Peak, timber harvesting and road construction on an average of 105 acres disturbed per year would cause short-term increases in erosion and sedimentation rates of up to 357 tons per year but is not expected to exceed the threshold levels given in the Northwest Colorado Council of Governments 208 Plan. In the long-term, rates would return to or below pre-existing levels.

Dewitt John  
January 28, 1983

Page 2

affected by increased sediment yield? Does BLM plan to mitigate the injury to dams and other structures.

2 We favor only a moderate increase in Wilderness Areas in Colorado. The State Engineer's Office has the responsibility to administer water rights within Colorado. Our main concern regarding the designation of any area as a wilderness area is maintaining motorized access to future and existing reservoirs and irrigation ditch headgates. The motorized access is needed to these projects not only for maintenance purposes, but also for our Water Commissioners to maintain diversion records and our Dam Inspectors to evaluate the safety of dams. If water rights are not affected, then we do not have any problems.

The question "on what public land should the BLM appropriate water for public land management purposes" is rhetorically posed for four different subjects in chapter two of the DEIS. Does the BLM plan to appropriate water for these uses under Colorado Water Law? New livestock water sources such as wells, reservoirs, or catchment basins must be approved, constructed, and maintained subject to Colorado Water Statutes. Fish habitat ponds and recreation facilities must also be approved, constructed, and maintained in accordance with Colorado Water Statutes. We believe the BLM should inform potential buyers and lessors of BLM land that they are subject to applicable water statutes.

In the introductory material, the DEIS gives the interrelationship between the BLM and other agencies and individuals. In this portion of the report, it states that the BLM must apply to the Division of Water Resources (DWR) for water rights. This statement is incorrect. Colorado Water Courts are responsible for decreeing all water rights and changes of water rights. Our office, among other things, is responsible for administering water rights, issuing well permits and approving and inspecting dams that are within certain statutory specification requirements.

HDS/JRU:ipkr

cc: Lee Enewold, Div. Eng.

Response 2

As far as is known, existing water rights would not be affected in any of the areas studied for potential Wilderness designation. The Wilderness Management Policy states that operation, maintenance, and repair of existing water control structures may include occasional motorized access where no other reasonable or practical alternatives exist. The policy also states motorized equipment may be used for water resource investigations as long as the use is compatible with wilderness preservation. Approval by the BLM's State Director would be required.



RICHARD O. LAMM  
GOVERNORJOHN W. ROLO  
DIRECTOR

COLORADO GEOLOGICAL SURVEY  
DEPARTMENT OF NATURAL RESOURCES  
715 STATE CENTENNIAL BUILDING — 1313 SHERMAN STREET  
DENVER, COLORADO 80203 PHONE (303) 866-2611

TO: Stephen O. Ellis  
State Clearinghouse

FROM: Colorado Geological Survey

DATE: February 3, 1983

SUBJECT: GLENWOOD SPRINGS DISTRICT RESOURCE MANAGEMENT PLAN

We must take exception to a portion of the preferred alternative for Minerals Management, namely the closing of 2470 acres in the Deep Creek Canyon area. The closure of this area will have a significant impact on mineral development because it lies in or next to what has been identified as a major high-calcium metallurgical limestone deposit needed for the manufacture of iron and steel. A major steel manufacturer, CF&I, submitted permit applications and a detailed impact analysis for this property as early as 1975. A quarry and plant area would be developed in secs. 28, 33, and 34, T4S, R87W, with an aerial tram extending nearly 4 miles eastward to a rail loadout facility at Ootsero. Deposits of this size and high chemical purity are extremely rare in Colorado, and CF&I's decision to apply for this site came only after many years of exploration and careful economic evaluation. Closing the Deep Creek recreational site to mineral location would, in our opinion, seriously impede or defeat this critical mining proposal and so effect an unnecessary loss of a valuable mineral resource.

*Stephen D. Schwochow*  
Stephen D. Schwochow  
Engineering Geologist

It does not appear that there is justification for banning oil/gas drilling along the various streams as shown on Map 3-C. Drilling and production operations are compatible and this has been proven time and time again in both on-shore and off-shore sites around the world.

*Lewis R. Ladwig*  
Lewis R. Ladwig, Chief  
Mineral Fuels Section

vt

SDS-83-012

GEOLOGY  
STORY OF THE PAST KEY TO THE FUTURE

RESPONSE TO COMMENTER 14

Thank you for your comments.



## Division of Parks &amp; Outdoor Recreation

1313 Sherman Street, Rm. 618  
Denver, Colorado 80203  
Phone (303) 839-3437

February 25, 1983

Mr. George Francis, Director  
Bureau of Land Management  
1037 20th Street  
Denver, Colorado 80202

Dear Mr. Francis:

Thank you for allowing the State Recreational Trails Committee some additional time to review the White River MFP Wilderness Amendment and the Glenwood Springs RMP environmental impact statements.

The Committee met on February 23 to discuss both of these Plans. The results of the discussions are as follows:

- White River MFP Wilderness Amendment - The Committee passed a motion in favor of the proposed alternative. The Committee felt the proposed alternative was in the best interests of motorized and non-motorized recreationists.
- Glenwood Springs RMP - The Committee concurs with the proposed alternative, except for plans to close the Sweetwater trail to the Hack Lake area to motorized use. The trail is currently open to motorized use and the Committee felt that there hasn't been any damage or other reason to close it. A motion was passed that "trail numbers 2067 and 2032 to Hack Lake remain open to motorized use with an off-road limitation".

Again, thank you for allowing the Committee to respond at this late date.

Sincerely,

*Ralph Schell*  
Ralph Schell  
SCORP Planner

RS:nb  
cc: State Recreation Trails Committee

Richard O. Lamm  
Governor  
O. Monte Parker  
Executive Director  
C. Allen T. O'Malley, Jr.  
Director  
Colorado Board of Parks  
and Outdoor Recreation  
Richard G. Beardsley  
Chairman  
Phil Eggenstein  
Vice Chairman  
William A. Barber, Jr.  
Secretary  
Terrell J. Taylor  
Member  
Richard S. Barlow  
Member

RESPONSE TO COMMENTER 15

Thank you for your comments.





COLORADO  
HISTORICAL  
SOCIETY

Colorado State Museum 1300 Broadway Denver, Colorado 80203

March 25, 1987

Mr. Neil Morck  
State Director  
Bureau of Land Management  
2850 Youngfield Street  
Lakewood, Colorado 80215

Dear Mr. Morck:

Thank you for sending us a copy of your proposed language for Wilderness Environmental Impact Statements. This standard language should be appropriate for most upcoming EIS's where the likelihood of having significant cultural resource values is low.

You and your staff deserve congratulations for developing such a useful and comprehensive approach to a sensitive national issue. I can only hope other agencies will follow your lead.

Sincerely,

*Leslie E. Wildesen*

Leslie E. Wildesen, Ph.D.  
Deputy State Historic Preservation Officer

LEWing

RESPONSE TO COMMENT 16

Thank you for your assistance in developing wording suitable for discussion of cultural resources in Wilderness Environmental Impact Statements.

NOTE: The 2-page letter below to the Colorado Historical Society from BLM was included to help clarify letter 16.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
COLORADO STATE OFFICE  
2850 YOUNGFIELD STREET  
LAKEWOOD, COLORADO 80215

IN REPLY, REFER TO:

CO-931  
8100

PG. 1 of 2

FEB 9 1987

Grand Junction District	Office	AC	File
CO-931	CO-931		
CO-931	CO-931		
CO-931	CO-931		
CO-931	CO-931		
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CO-931	CO-931		
CO-931	CO-931		
CO-931	CO-931		

Dr. Leslie Wildesen  
Deputy State Historic Preservation Officer  
Colorado Historical Society  
1300 Broadway  
Denver, Colorado 80203

Dear Dr. Wildesen:

Thank you for taking time to talk with Rick Athearn and Eric Finstuck of my staff on January 12, 1987. I understand that you agreed that the draft language we have proposed to use in most, but not all, of our Wilderness Environmental Impact Statements (EISs) is suitable.

I am enclosing a revised copy of the wording that was discussed. I trust that we can use it in those EISs where cultural values are known to be minimal. I understand that we cannot use such general language in EISs where there are extensive and well known cultural resources, such as in the San Juan (Colorado) Resource Area.

Please provide me with any further comments regarding this proposed language acknowledging the importance of cultural values in potential wilderness areas.

If you have questions, please contact Dr. Athearn, Cultural Resources Program Leader, at 236-1756.

*Neil P. Morck*  
Neil P. Morck  
State Director

Proposed Wilderness Language  
Cultural Resources

PG. 2 of 2

Generally, wilderness designation is not adverse to cultural resources because they will generally benefit from an area being designated as wilderness. Such designation legally precludes development, land disturbances, motorized use, and other damaging or intrusive human effects. Most wilderness users tend to be sensitive to their environment and thus are far less likely to "pothunt" than others. Wilderness areas totally eliminate access by road and thus eliminate the use of vehicles or heavy equipment for vandalism purposes. A 1979 study (Nickens, et al., 1979) has confirmed that cultural sites more than one half a mile from a road are much less vandalized than those sites near a roadway.

Inventory procedure is well-established and is done whenever surface disturbance occurs in a non-inventoried area. Mitigation for site loss or damage is normally done when a site qualifies for inclusion in the National Register of Historic Places. This is required by law. Mitigation can range from site excavation and analysis to site avoidance through project redesign. If an area is not designated wilderness, it may be opened to development such as oil and gas, roads, timber sales, and other surface disturbing activities. Such disturbances may cause destruction to significant cultural resources and can open up regions without previous access. Increased access can provide vandals and "pothunters" easy ability to loot and the damage to cultural resources can increase greatly. It should be noted, however, that most all development on the public lands requires inventory and mitigation for cultural resources, thus providing legal protection which occurs whether an area is designated as wilderness or not.

At the time a wilderness management plan is developed, procedures for the identification and protection of cultural resources will be considered as part of that process. This will include inventory, when appropriate, mitigation as needed, and consultation with the State Historic Preservation Officer as required under 36 CFR 800.4. At present, no historic properties, as defined in 36 CFR Part 60 (National Register of Historic Places), are known to exist within the wilderness study areas included in this document. In those cases where significant cultural values are known to exist, or that are suspected to be present, the legislation that is developed must address access, and scientific or educational uses, that may be required.





## pitkin county

506 east main street  
aspen, colorado 81611

January 12, 1983

Mr. Al Wright, Manager  
Glenwood Springs Resource Area  
U.S. Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, Colorado 81601

Dear Al:

This is to convey to you the concerns of the Pitkin County Commissioners relative to the Draft Resource Management Plan for the Glenwood Springs Resource Area. Given the limited amount of BLM acreage in Pitkin County, our comments will not be comprehensive in nature, but will address those areas in which the County has established policy or is directly affected by the proposals of the Resource Management Plan.

### Wilderness

It has been the policy of Pitkin County to support wilderness designations in areas where wilderness values and resources exist, local governments and populations are not opposed, and no significant resource conflicts are present. Since all the Wilderness Study Areas in the Resource Area appear to meet these criteria, it is extremely disappointing to note the meager wilderness recommendations in this Draft. We find the rationales for the non-wilderness recommendations of Bull Gulch and Castle Peak to be unconvincing. The Draft states on page 80 that these areas include valuable ecological, geological, recreational, scenic and wildlife resources. Wilderness designation is the only management option that will provide permanent protection for these resources and there is no reason to believe that wilderness management should present any more "manageability problems" than the several overlapping designations and restrictions that the RMP suggests as an alternative. The timber and motorized recreation opportunities that are given precedence in the case of Castle Peak cannot justify exclusion of this area from Wilderness. Timbering is a minor factor in the local economy in comparison to the recreation industry of which wilderness is an important component. There is ample evidence

### RESPONSE TO COMMENTER 17

Thank you for your comments. BLM is now recommending 10,754 acres in three WSAs (Eagle Mountain, Back Lake, Bull Gulch) as preliminarily suitable for wilderness designation.

Letter to Mr. Al Wright, Manager  
January 12, 1983  
PAGE TWO

that motorized recreation opportunities far exceed demand in the area, while the opposite is the case with primitive recreation. To deny Castle Peak a Wilderness recommendation in favor of these resources is not justified. We find the BLM's apparent anti-wilderness bias to be unacceptable and inappropriate, and we urge the Bureau to reconsider and reverse its wilderness recommendations in the Final Environmental Statement.

### Recreation

We do not feel that the significant shift in recreational emphasis from the primitive and semi-primitive end of the spectrum to more motorized and developed recreational opportunities is appropriate or justified. As is noted on page 75 of the Draft, "...most users prefer those (recreational) settings that are most primitive in character." Given this user preference, and given that semi-primitive non-motorized recreational opportunities are presently available on only one-tenth the acreage of semi-primitive motorized recreation, we feel that much greater emphasis must be placed on the preservation and expansion of primitive and semi-primitive recreation opportunities. We do not agree with the contention that a reduction of 55% in semi-primitive non-motorized acreage will have low adverse impacts. Such a reduction will represent an irretrievable loss of recreational resources, it will increase use pressure on adjacent National Forest lands, and it will increase management problems associated with motorized recreation such as noise, dust, litter, and unauthorized off-road travel. While we recognize that some road development must accompany BLM management actions, we do not think those roads should be converted to recreational use except in areas where recreational demand and ongoing management needs justify such action.

### Thompson Creek Natural Environment Area

While we support the designation of a Thompson Creek Natural Environment Area, we do not think that the management of this area as described in the Draft is sufficiently restrictive. We do not, for instance, support the establishment of a snowmobile parking area at the edge of the area. We think that snowmobile use within the area is totally incompatible with its management as a Natural Environment Area and that establishment of a snowmobile parking area would unnecessarily encourage such use. We also believe that the reclassification of 2,698 acres in Thompson Creek from semi-primitive non-motorized to semi-primitive motorized is similarly incompatible with NEA



Letter to Mr. Al Wright, Manager  
January 12, 1983  
PAGE THREE

management. The area affected by this reclassification is not adequately shown on Map #3-22 and must be clarified in the Final Environmental Statement. In any case, we do not believe that "environmental education opportunities that are more consistent with management objectives for the semi-primitive motorized class" (p. 171) are a worthwhile objective or justification for this reclassification.

Finally, we would request that the Thompson Creek Area be withdrawn from all mineral location, sales, or leasing instead of the partial withdrawal recommended in the Draft. Any mineral development in Thompson Creek would destroy its value as an NEA, and we do not believe that such a withdrawal would have any significant effect on the value of local mineral resources.

#### Land Tenure Adjustments

In general, we do not object to land tenure adjustments if environmental resources and County Land Use priorities are not sacrificed in the process. The attached comments of the City-County Planning Office speak to the latter question. We note that land tenure adjustments may result in the loss of over 6,000 acres of critical winter range in the Roaring Fork Capability Unit. This loss could translate into unacceptable depletions of big game populations. We request that any adjustments which include critical winter range be limited to exchanges for land of similar value in the same general area so that the maintenance of local wildlife populations is assured.

#### Water Yield and Timber

We do not think that the benefits of these programs justify their impacts on primitive recreation, wildlife habitat, soil and water quality, and scenic resources. For instance, an 8% increase in water yield will only have beneficial impacts if that increase can be captured and stored for use during water-short seasons. The lack of such storage facilities within the resource area indicates that any increased water yield will not translate directly into beneficial water use, but will instead be lost downstream with other spring runoff flows. The aspen that would be cut in the process has no value on the timber market and would yield only marginal wildlife and domestic forage benefits.

The Draft states that low timber harvest levels (.7 mbf saw-

Letter to Mr. Al Wright, Manager  
January 12, 1983  
PAGE FOUR

timber and 2,650 cords fuelwood annually) would meet local timber demands. Given this, and the generally depressed state of the local timber industry, we see no justification for increasing timber targets to 1.8 mbf sawtimber and 3,535 cords fuelwood annually. We believe that vegetation and forest management programs should concentrate on preserving and improving existing wildlife and domestic forage resources rather than subsidizing a timber industry which shows no sign of expanding to deal with increased supplies.

#### Miscellaneous Points

The proposed snowmobile parking area on the Prince Creek Road is 1 1/4 miles beyond the furthest point of winter maintenance on that road. While we have no objection to the establishment of a snowmobile parking facility in this area, we do not have any plans to increase winter maintenance levels, and the BLM may wish to reconsider this location with this in mind.

We support the establishment of a river access site in the Snowmass Junction area. Please consult with us as plans for this site develop so it can be integrated with County road and traffic management plans.

On page 158, under Impacts from Minerals Management, the Draft states, "Potential short-term, generally insignificant salinity and sediment impacts would continue to occur from existing mineral developments. Spoil pile runoff would increase surface water salinity and sediment. A secondary source of these impacts would include improperly designed or rehabilitated roads, pipelines, and drill pads. Impacts would continue until...rehabilitation." This rather cursory dismissal of mining impacts is disturbing in light of the potential for increased mining activity and subsequent impacts in the resource area. Does not the BLM have standards that will prevent or mitigate "improperly designed or rehabilitated roads, pipelines and drill pads"? "Rehabilitation" generally refers to revegetation of disturbed soils. Water quality impacts such as those described above can and should be mitigated as part of pre-development site design and permitting and the BLM should make a strong commitment to such mitigation in the RMP.

We would like to see the lower Colorado River corridor designated an Area of Critical Environmental Concern to allow for the strong protection of Great Blue Heron rookeries, Bald Eagle wintering areas, Razorback Sucker habitat, and other unique resources. As the Draft notes on page 163, this corridor is



Letter to Mr. Al Wright, Manager  
January 12, 1983  
PAGE FIVE

being subjected to heavy development pressure and the irreplaceable resources of the riparian zone are being lost at a rapid rate. The Cooperative Management Area designation is a step in the right direction, but we feel that this is truly an Area of Critical Environmental Concern and should be afforded the greater protection that such designation would allow.

We cannot agree with the statement on page 165 that "localized long-term beneficial impacts to wildlife (from Forest Management), especially big game, would result from increased forage production, habitat diversity, and ease of movement." On the contrary, we think that the adverse impacts of timbering would be long-lasting and severe. These impacts would include loss of solitude and escape cover, loss of calving habitat, and increased harassment, hunting pressure, poaching, and wildfire potential due to increased road access.

In summary, we feel that the Draft RMP overemphasizes development and commodity outputs at the expense of long-term resource values. The final plan should reduce the emphasis on such marginally beneficial programs as water yield and timber harvest and instead increase efforts to improve big game and domestic forage, preserve primitive and semi-primitive recreation opportunities, and preserve air and water quality.

Thank you for the opportunity to comment on this plan, and please let me know if any further information would be useful.

Yours truly,

Mark Fuller  
Environmental Coordinator

MF:ed  
Attachment

cc: Board of County Commissioners  
Glen Horn, Planning Office  
Roz McClellan



January 21, 1983

Mr. Alfred Wright, Area Manager  
Bureau of Land Management  
Glenwood Springs, Resource Area  
P. O. Box 1009  
Glenwood Springs, Colorado 81602

Dear Mr. Wright:

The City of Glenwood Springs has reviewed the Draft Environmental Impact Statement on the Glenwood Springs Resource Management Plan.

The City has the following comments:

1. We strongly support the Bureau's designation of the critical watershed area above the City as Areas of Critical Environmental Concern (ACEC). These watersheds directly contribute to the serious, periodic debris flows suffered on properties located within the City limits. While we generally support the Preferred Alternative, we suggest leaving open to further investigation the extent of vegetative manipulations and other management actions to protect the watershed. The City's debris flow mitigation study has just been completed and should be of value to BLM in completing management proposals for this ACEC.

The City is an interested party with regard to grazing allotments in the ACEC and requests consultation upon any changes in this and other management practices.

2. The City applauds the proposal to have a BLM-maintained foottrail from the City to the summit of Lookout Mountain. I am certain that the City will do its part to manage the in-city portion to encourage use of this scenic resource.

RESPONSE TO COMMENT 18

Thank you for your comments.



3. The Bureau's objectives for big game populations under the Preferred Alternative - 21 per cent decline over the next 10 years - are a serious concern to the City. Glenwood Springs and neighboring communities depend heavily on the economic activity generated by tourism. Hunting is a large component of that base activity. It would seem that aggressive efforts by BLM to protect crucial winter range, to increase forage and to work cooperatively with the Colorado Division of Wildlife will more than pay for themselves. The benefits in diversifying the regional economy are substantial.
4. The visual resources of Glenwood Springs are a key to its attractiveness, hence to its economy. The City recommends that the Visual Resource Management Classes for BLM lands visible from within the City be upgraded to Class II or III. Classifications beyond this crucial view plane may be as shown in the Preferred Alternative (classes III and IV). "Retention of the landscape character" (class II) should be a management objective throughout the City's viewshed.
5. BLM should work closely with Garfield County on reconciling management objectives for the Colorado River corridor. As noted in the RMP, the County zoned this corridor industrial to accommodate sand and gravel operations. BLM proposes to allow these operations only if they are consistent with protection of important riparian wildlife and recreational values. This conflict in management of objectives should be resolved, with values balanced by recognizing the importance of both tourism and industry to the region.

On behalf of the City, I appreciate the effort that BLM has expended to make the Resource Management Plan a document balancing the needs of the many varied interests in this large planning area. The City looks forward to working with the Bureau in accomplishing the objectives of the final plan, especially in the critical watersheds above the City.

Sincerely yours,

  
Stephen M. Fattor, Mayor

enc.

Aspen/Pitkin Planning Office  
130 S. Main Street  
Aspen, Colorado 81611

January 27, 1983

Mr. Al Wright, Manager  
Glenwood Springs Resource Area  
U.S. Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, Colorado 81601

Dear Mr. Wright,

The Aspen/Pitkin County Planning Office and the Pitkin County Commissioners have reviewed the Environmental Impact Statement (EIS) on the Glenwood Springs Resource Management Plan. This correspondence and the January 12, 1983 letter from Mark Fuller, Pitkin County's Environmental Co-ordinator, constitute the County's official comments on the draft EIS. While Mark Fuller's letter addressed a wide range of County concerns, this letter is oriented primarily toward land use in Pitkin County, particularly the proposed land tenure adjustments.

The "Preferred Alternative" proposes either the sale or exchange of approximately 6,300 acres of land in the Roaring Fork capability unit. Most of the land area proposed for disposal is located in rural Pitkin County and is zoned RS-30 PUD. The RS-30 PUD zone is a resource zone in which development is limited to 1 dwelling unit per 30 acres. We are concerned that the proposed transfer of BLM land to private hands may create significant development pressures in Pitkin County which may result in requests for zoning to higher densities. Since some of the land targeted for disposal is located in the vicinity of agricultural lands and operations, it is possible that the disposal and ultimate development of the BLM holdings could serve as the catalyst for increased development pressures in rural Pitkin County which may result in conflicts between human activity and nearby agricultural operations.

Page 47 of the draft EIS cites several criteria that were used as the basis for selecting the "Preferred Alternative". The first criteria states:

1. "Recommendations should reflect a high degree of compatibility with the goals of other agencies. The "Preferred Alternative" should agree as much as possible with the approved goals of state and local governments and other federal agencies, except as those goals conflict with the laws, regulations and policies directly governing BLM management actions."

It should be very clearly understood that any transfer of BLM lands which results in a conversion of open space wilderness areas to developed land would be inconsistent with County land use policies. Specifically, the proposed disposal of BLM land holdings is in potential conflict with the following three adopted policies of the Pitkin County Land Use Code. These policies and brief explanations of the conflicts are referenced below.

RESPONSE TO COMMENTER 19

Thank you for your comments.



Policy 2-3.6 "It is the policy of the County to prevent the construction of any improvement or the operation of any use which may cause immediate or foreseeable material danger to significant wildlife habitat or which would endanger a wildlife species."

Approximately 6,000 acres of the land in the Roaring Fork capability unit have been identified by the BLM as critical winter range. The proposed land tenure adjustments may result in the loss of winter range lands and threaten big game populations.

Policy 2-24 "It is the policy of the County to preserve and protect public lands, including but not limited to National Forests and Bureau of Land Management lands, from the impacts of incompatible development." To this end it is the policy of the County to:

- 2-24.1 Ensure that development surrounding or near public lands will not cause high concentrations of population in such areas.
- 2-24.2 Avoid development that will encourage the intrusion of roads or high level of human activities on such lands.
- 2-24.3 Ensure that any development will not result in adverse environmental impacts on such lands as water or air pollution and threats to wildlife habitat by dogs or human activity."

As Map 3-34 of the EIS indicates, portions of the land identified for exchange in the East Sopris Creek valley are located adjacent to or nearby the White River National Forest. Although some of the land identified for exchange may never be developed due to various environmental constraints upon development such as steep slopes, the potential does exist for some development on land located nearby Forest Service land. The development of such land at densities greater than permitted under existing zoning would be inconsistent with the policies cited above. It is very doubtful that the BLM would apply for the upzoning of the land in the East Sopris Creek valley. On the other hand, if the land is transferred to private ownership, it is more likely that there may be a rezoning request for higher density zoning.

Policy 2-25 "It is the policy of the County to provide for efficient phasing of public services and facilities at a reasonable annual growth rate in each planning area of the County; to prevent the location of activities and developments which may result in significant changes in population densities not consistent with the foregoing and, if necessary, to apply building or development phasing procedures designed to assure that the foregoing shall not be exceeded."

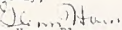
As indicated previously, the land identified for land tenure adjustment is located in rural Pitkin County. The County seeks to maintain the rural character of the area and has zoned the land accordingly. The County does not plan to provide additional public services in the near future to the BLM land targeted for disposal. The transfer of the BLM land to private hands may result in the demand for additional public services that are not currently being planned for. The provisions of these public services would be in conflict with Policy 2-25.

Based on the potential conflicts outlined above, potential development pressures and the possible resulting adverse impacts on agricultural operations which may be indirectly caused by the proposed land tenure adjustments, Pitkin County prefers the Resource Protection alternative to the "Preferred Alternative".

As Table 5-14 of the draft EIS indicates, under the Resource Protection alternative approximately 2,030 acres of land in the Roaring Fork capability unit will be disposed of. This estimate is approximately 4,280 acres less than the land targeted for disposal under the "Preferred Alternative". As you may know, Pitkin County has adopted land use policies designed to preserve the existing rural character of the County. Although the proposed land tenure adjustments will not directly result in immediate growth, we do feel that the County land use policies can best be met by maintaining the existing BLM land in public ownership. Pitkin County proposes that if the BLM must dispose of, or exchange, any public lands, the land be transferred to a public entity rather than a private ownership. The retention of BLM lands in public ownership will increase the probability that open space and big game winter range will be preserved.

Thank you for referring the draft EIS to us for our comments. Please contact me if the Aspen/Pitkin Planning Office can be of assistance.

Sincerely,

  
Glenn North, Planner  
Aspen/Pitkin Planning Office

cc: BOCC  
Curt Stewart, County Manager  
Mark Fuller, County Environmental Co-ordinator  
Sunny Vann, Planning Director  
Randy Cote, Division of Wildlife  
Dennis Bschor, U.S. Forest Service



## GARFIELD COUNTY Board of County Commissioners

P.O. Box 640 Glenwood Springs, Colorado 81601 Telephone (303) 945-9158

FLAVEN J. CERISE JIM DRINKHOUSE LARRY VELASQUEZ

January 28, 1983

Alfred Wright, Area Manager  
Bureau of Land Management  
Box 1009  
Glenwood Springs, CO 81602

RE: Environmental Impact Statement for the Glenwood Springs Resource Area

Dear Mr. Wright,

The Garfield County Board of Commissioners appreciates the opportunity to comment on the Glenwood Springs Resource Area Environmental Impact Statement. There are several points concerning the EIS that the Board feels must be addressed.

A primary concern is land tenure. Garfield County has Federally owned land placed in the O/S (Open Space) zone district. The Garfield County regulations currently allow flexibility in this zone district for Federal projects. However, if the public land within the O/S zone district were to transfer into private ownership, we would no longer consider this zone district appropriate. It is our understanding the Board will be given the opportunity to review each land sale or transfer, prior to any action being taken by the BLM. At this point, the Board would like to suggest placing conditions we feel are necessary. The Board is concerned that appropriate zoning is acquired by private individuals or groups who purchase public lands. This zoning will be subject to existing land uses in the area as well as the Garfield County Comprehensive Plan goals for the particular area in question. In regard to this, the Board asks to be given a reasonable time period to review actions which will affect Garfield County. The Board would also encourage the BLM to give priority consideration to local governments that are interested in the purchase, exchange and/or negotiation of Federal lands subject for disposal.

The Economic Development Alternative recommends disposal of public lands in several areas of the County that are currently experiencing development pressure. These areas are Cattle Creek and the Divide Creek/Dry Hollow area south of Silt. There are presently heavily increasing demands on the county roads in both areas. If the additional land is made available to private developers, the potential demand for county services would increase substantially. The land tenure adjustments sited under the Preferred Alternative are more consistent with the County's concerns in the Cattle Creek area; however, the Preferred Alternative and the Economic Development Alternative are the same regarding land tenure in the Divide Creek/Dry Hollow area. It is the desire of the Board to work with the BLM to develop a suitable time schedule for the sale and transfer of lands that will be disposed of in order that potential impacts on county services can be appropriately addressed.

## RESPONSE TO COMMENTER 20

Thank you for your comments. The Proposed Action in this FEIS recommends 10,414 acres of the Bull Gulch WSA as suitable for wilderness designation.

Page 2, Alfred Wright, Bureau of Land Management

The following comments are made regarding specific resources addressed in the Environmental Impact Statement:

BIG GAME POPULATIONS:

The Preferred Alternative states that land disposals and additional habitat lost to private land development over the next 10 years will result in an overall 21% decline in big game population. This Alternative also points out a drop in annual personal income over one million dollars could also be expected from the shortfall of available big game forage on public land. Hunting plays a major role in diversifying the economy of Garfield County. Thus, it is the Board's position to support maintaining big game population that will continue to attract hunters to the area. One goal of the County Comprehensive Plan is to protect major wildlife habitats. Therefore, the recommendation in the Economic Development Alternative to dispose of over 5,000 acres of crucial winter range for big game in the Cattle Creek area is inconsistent with Garfield County's Comprehensive Plan.

MINERAL MANAGEMENT:

Due to the increased demands for mineral extraction, the Board would like to express support of continued cooperative efforts with the BLM in dealing with mineral resource development/management.

UTILITY AND COMMUNICATION FACILITIES:

Garfield County will continue to cooperate with the BLM to further identify suitable locations for proposed utility and communication facilities.

TRANSPORTATION:

The Board recognizes the benefits of acquiring easements to currently inaccessible public lands when there are no adverse impacts on the private landowners involved.

WATER QUALITY:

Garfield County supports the recommendation of the Preferred Alternative to increase water yield, reduce sedimentation and decrease the salinity of rivers and streams.

WILDERNESS:

The Board questions the removal of the Hack Lake and Bull Gulch areas from further wilderness consideration studies. The Garfield County Comprehensive Plan states that recreational opportunities provided by wilderness areas are a vital part of Garfield County's tourism appeal.

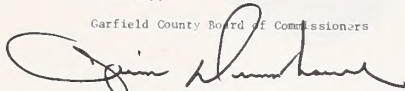
The use and management of Bureau of Land Management land in Garfield County is a concern of the Board. We support your efforts to complete and implement a final Resource Area Management Plan that is responsive to the needs of the citizens of Garfield County.



Finally, the Board would like to express it's appreciation to the Bureau of Land Management for the opportunity to comment on this Environmental Impact Statement. If you have any questions or comments, please do not hesitate to contact this Board.

Sincerely,

Garfield County Board of Commissioners



Jim Winkhouse  
Chairman

JD:lw



February 1, 1983

Mr. Al Wright  
Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, CO. 81602

Dear Al:

I am writing on behalf of Carbondale about the proposed Resource Management Plan. Carbondale is concerned with activities both in and outside its municipal boundaries which may impact its future. Carbondale depends heavily upon tourist dollars especially under the current coal slowdown situation. The tourist attraction to this area depends heavily upon the use and administration of public lands. I will try to keep my comments to the point.

1. Water Yield - Concern over the impact of the Economic Development Alternative on the available water supplies for the municipal water system. Support should be given to the Preferred Alternative.
2. Critical Watershed - Support for the Resource Protection Alternative in the area identified as erosion hazard area east of Carbondale, south of 100 Road.
3. Minerals Management - Support for the Preferred Alternative to include additional lands restricted from mineral leasing in the North Thompson Creek area.
4. Terrestrial Habitat Management - Support for Preferred Alternative. Hunting is an activity which benefits the local economy.
5. Forest Management - Red Hill is a serious area of concern to Carbondale. The area is identified on all alternatives as suitable for fuelwood sales. The Economic Development Alternative also shows fuelwood areas in excess of 40% slope. We could support very limited wood cutting which would have no visual impact from Carbondale. The Economic Development Alternative

RESPONSE TO COMMENTER 21

Thank you for your comments.



Mr. Al Wright  
February 1, 1983  
Page Two

could not be supported. The Town would like to see the area maintained in a natural state and possibly developed as a passive recreation area in the future.

6. Recreation Management - There should be more river access sites designated on the Roaring Fork and Crystal Rivers. None of the alternatives show any access sites in the vicinity of Carbondale. Much of the property along the rivers is private with no public access. Access to the rivers for boating, fishing and enjoyment is important on both rivers and will become more important as the area continues to develop.
7. Visual Resource Management - On all maps, indicates the area around Red Hill north of the intersection of Highways 82 and 133 is designated as Class IV visual resource. The area is visually important to Carbondale. It is important that the area be improved visually but that no further deterioration of the resource occur.
8. Land Tenure Adjustments - The public lands around Carbondale are important in providing open space and recreational areas near the Town. If parcels are available for sale, Carbondale would like to have advance notice and be able to participate as possible buyers. The Economic Development Alternative would not be supported and preference should be made for the Resource Protection Alternative.
9. Off-Road Vehicle Management - The Resource Protection Alternative or the Preferred Alternative should be retained.
10. Transportation Management - Carbondale would like to see consideration given to possible public access to public lands on Red Hill. The Red Hill area would be a good future site for some passive recreational uses.
11. Utilities and Communications Facilities - The exposed areas in the valley bottoms and on the surrounding benches would and should be considered unsuitable for above ground construction of utilities. Any utilities constructed underground should be completed in a manner that minimizes scarring of terrain and vegetation. All utility sites should be completely rehabilitated. Public lands which are removed from immediate view sheds may be appropriate

Mr. Al Wright  
February 1, 1983  
Page Three

for construction of facilities. These sites should not allow skylining of structures, should utilize terrain and vegetation to hide structures, should not allow for vegetation clearcutting and should involve careful site review. Significant problems can be avoided with proper preapplication conference review with all impacted entities.

I want to thank you for this opportunity to comment on the plan. Local input is very important to the process which should respond to local needs. Admittedly, these comments are brief but generally cover Carbondale's major concerns.

If we can be of any further assistance to your office, please contact us.

Sincerely,

*Davia Farrar*

Davia Farrar  
City Manager/Planner

DF:nb



TELEPHONE  
303/328-7311

Board of County  
Commissioners  
Ext 241

Assessor  
Ext 202

Clerk and  
Recorder  
Ext 217

Sheriff  
Eagle Ext 211  
Basalt: 927-3244  
Giltman: 827-5751

Treasurer  
Ext 201

Administration  
Ext 241

Animal Shelter  
949-4292

Building  
Inspection  
Ext 226 or 229

Community  
Development  
Ext 226 or 229

County Attorney  
Ext 263

Engineer  
Ext 236

Environmental  
Health  
Ext 238

Extension Agent  
Ext 247

Library  
Ext 255

Public Health  
Eagle Ext 252  
Vail: 476-5844

Personnel  
Ext 241

Purchasing  
Ext 245

Road and Bridge  
Ext 257

Social Services  
328-6328

# EAGLE COUNTY

Eagle, Colorado 81631



February 7, 1983

Alfred Wright, Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
P. O. Box 1009  
Glenwood Springs, CO. 81602

RE: Eagle County Comments on the Draft Environmental  
Impact Statement on the Glenwood Springs Resource  
Management Plan

Dear Al:

The Board of County Commissioners for Eagle County has  
reviewed the Draft Environmental Impact Statement for the  
Glenwood Springs Resource Management Plan and wishes to  
make the following comments:

- 1) The document as a whole encourages the  
Multiple Use concept, which is in accord  
with the Eagle County Master Plan dated  
April, 1981. The Board of County Commissioners  
strongly supports this concept.
- 2) More specifically, the Board generally agrees  
with the Preferred Alternative in the major  
policy areas including: water quality, water  
quantity, mineral restrictions, wildlife  
habitat improvement projects, livestock and  
wildlife allocations, timber allocations,  
management practices, wilderness designations,  
visual resource designations, utility and  
communication facilities siting, transportation  
and wildfire management zones.

RESPONSE TO COMMENTFR 22

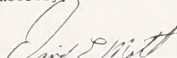
Thank you for your comments.

WRIGHT  
FEBRUARY 7, 1983  
PAGE 2

- 3) The Board particularly supports the de-  
signation of areas where special management  
plans will be developed. The Board would  
like to participate in the development and re-  
view of the special management plans pre-  
pared for lands in Eagle County.
- 4) The Board does have a specific concern with  
the suggested policy to encourage disposal  
of Public Lands. The Board is concerned  
both with some of the lands designated for  
disposal and the method of disposal. The  
major concern is that lands with grazing  
rights currently on them be encouraged to  
remain in agricultural uses and that lands  
with limited development potential not be  
given false expectations for the amount of  
development that might be allowed on them.  
The Board would like to work closely with  
the Bureau of Land Management in further  
developments with the land disposal program.

Finally, the Board of County Commissioners wants to en-  
courage the continuation of the open lines of communication  
between your office and the Board that have existed over the  
last few years. The Board would appreciate advance know-  
ledge of any major projects proposed on lands within your  
district or of any proposed changes to either your current  
operating policies or new ones developed through the Resource  
Management Plan. The Board supports the effort and direction  
of the Draft Environmental Impact Statement.

Sincerely,

  
David E. Mott, Chairman  
Board of County Commissioners

DEM:epm

22



Howard E Tingley  
12433 Hwy 82  
Carbondale, Colo 81623  
14 December 1982

Bureau of Land Management  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, Colo 81602  
Attn: Mr. Alfred Wright, Area Manager

Subj: Personal comments on the Draft  
Environmental Impact Statement on the  
Glenwood Springs Resource Management Plan.

Dear Mr. Wright,

I commend you and your planning and environmental impact statement team for the rather credible and certainly substantial efforts dedicated to the draft E.I.S. prepared as required by Congress. My comments in general and in specific are not intended as calls on the teams diligence or judgement. They are personal opinions formed by my experiences, education, and consequently my philosophical bent. I thank the system and procedures which allow not only myself but others of both like and different persuasion the opportunity to comment.

Regarding comments in general, my primary concerns follow .

I propose that alternatives can only be reasonably compared by reducing them to common terms of money and time. In so far as this draft E.I.S. is a document prepared to assist those decision makers charged with selecting a land use management plan, of what value is the end result of a plan prepared on the basis of personal desire as influenced by self interest groups and by emotional motivations? Errors can and are made in judgements of time value of money, estimates of costs, and in values of benefits. However, a comparison of alternates using equal base values to arrive at money terms is inherently fairer and wiser than a comparison without benefit of time and money analysis. Costs must be related to all specific elements of each alternative if any reasonable or reliable decision guide is to be made available.

Mineral development is often challenged because of real or imagined damage to the environment; yet little if any consideration is given to social and economic impacts created by the failure to provide for mineral development. Expanding land development and restrictive land management practices are constantly impacting utilization of our nations mineral resources. Planners at all levels of government are placing more and more land into restrictive use categories. Unfortunately commercial mineral deposits are extremely rare, they occur where placed by Mother Nature. Until locations are known, reasonable land withdrawals through wilderness study designation, recreation resource designation, or other land use restrictions is impossible. To put mineral development into a realistic perspective I enclose a pie chart showing totality of mining from 1776 to 1973. This chart demonstrates the minimal impact of mining which is so frequently blown totally out of proportion when viewed in newsprint, on the television, or as covered by biased self interest groups.

Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 2 14 December 82

Malthusian like predictions by certain groups of self-proclaimed environmental experts on wilderness needs are generally emotional statements without proper foundation. The suggestion so often used that to not designate a certain desirable, possibly unique and fragile, parcel as a wilderness condemns it to destruction and loss cannot support close scrutiny. If this were true, how could many of these same fragile and unique areas have survived the last 50 or 100 years of man's imprint? Prudent management in conjunction with responsible guidelines, checks and balances, inputted with state and county land use regulations together show ample controls to prevent the unbridled exploitation or destruction of primitive resource areas and serve far better to protect societies interests than any known confrontation or isolation strategies.

My specific comments are addressed hereafter with reference to chapter, page and section, sub-section and paragraph as applicable, or to table or map number:

ITEM	COMMENT
1. Summary - pg ix Continuation of Current Management	Management practices listed are rather negative and I wonder if they are in accordance with existing BLM caretaker responsibilities? They do not include the positive impacts of environmental and conservation groups nor of responsible state, county, municipal, or other private agencies.
2. Summary - pgs x - xiii Resource Protection, Economic Development, and Preferred Alternatives	When the inventory of natural resources is incomplete how can impacts or restrictions placed on mineral developments in these alternatives be honestly assessed?
3. Chap. 1 - pg 3 The Planning Process Steps 8 & 9	Language suggests land resource management plan selection is to be made without regard to costs. The fact that implementation will require adjustments according to funding constraints is an irresponsible way to begin any management plan and only sets a scenario for likely failure.
4. Chap. 1 - pg 5 Interrelationship with other programs. USGS	U.S.G.S. mapping provides some accurate maps. However, many are old and outdated, they are not complete or accurate in all aspects of management plan needs.
5. Chap. 1 - pgs 5 & 6 State	Do the state agencies listed have the resources to adequately assist?
6. Chap. 2 - pg 9 Minerals Management	Does the minerals management planning criteria follow intent of the Federal Mining Law of 1872?
7. Chap. 3 - pg 13 General Criteria Used to Formulate Alternatives, Item 6	What guidelines or definition was used to establish an area as suitable for designation as an A.C.E.C.?
8. Chap. 3 - pg 13 Capability Units	Capability Unit Boundaries do not reflect breakdown to common units, especially when including political views, attitudes, values, and existing land uses or better land use regulations. (ie - can you imagine someone from Aspen identifying with one from Carbondale or Glenwood Springs? Recent results of state representative race should give a clue.)



Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 3 14 December 82

9. Chap. 3 - pg 15  
Resource Protection,  
Economic Development &  
Preferred Alternatives  
Reiterate -- Alternative selection should include costs of plans and ability of funding.
10. Chap. 3 - pgs 18 & 19  
Critical Watershed  
Areas  
Debris flow hazard is being addressed by the City of Glenwood Springs with intent to implement regardless of management plan selected. New developments adjacent to debris flow hazard areas have been directed to design for or to otherwise control debris flows. Existing constraints are adequate to promote and implement proper management practices. The additional A.C.E.C. designation is superfluous.  
The fire burned area on public land east & south-east of 23rd and Bennett in Glenwood Springs should be re-vegetated or otherwise stabilized to reduce the high soil erosion problem there.  
An other area not addressed and which seems to continually create some drainage and infrequently debris flow problems is Red Canyon Creek. This may be a problem with the Glenwood Ditch in conjunction with Red Canyon Creek. What is the BLM's responsibility on this watershed area?
11. Chap. 3 - pgs 19 - 23  
Minerals Management  
The complete minerals management proposal is a gambit for stifling the development of our nations mineral resources. Too often, as the past has proven, over zealous restrictions and regulations have created an adversarial relation between private enterprise who is called upon for the orderly and economic development of domestic resources by Congress' and the BLM who is charged with caretakers' responsibility. Instead of fostering a spirit of cooperation and utilization of best state of the art in mining and reclamation techniques the BLM creates an additional arena in which the legal profession can enjoy their games. The minerals management proposals outlined make more work, reduce economic benefits to the whole of society, and create ambiguous standards which will defy consensus of opinions (ie - "Development that would not significantly conflict with environmental, economic, or social values would be approved.").  
What protection is made available to existing claims, leases, sales, and other resource development plans? Please remember nature was not so selective in the placement of natural resources. Given an acute need, indeed Congress could reverse excessive restrictions but, time requirements for exploration and production development are so great and when coupled with the zealous objections of a few environmentalist organizations the obstacles to an orderly and timely development are so considerable as to generally terminate the effort.  
Mining and Minerals Policy Act of 1970

Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 4 14 December 82

12. Chap. 3 - pg 26  
Livestock Grazing  
Management para 1  
"Existing Livestock Use" is not defined in the glossary. I expect "Actual Use" - defined - was intended to mean existing use. Clarification should be made.
13. Chap. 3 - pg 26  
Table 3-6  
Existing use total is 37,408 from a summary made of Table F-1, not 37,709 shown. Initial allocation is 28,271 from same source, not 26,443 shown. What is the discrepancy?  
There are several voids in Table F-1 which causes the change in Existing vs Initial allocation to not add-up. Errors may also play some part such as opposite allotment number 8029 where under the C.C.M. Alt. the change should be -113.
14. Chap. 3 - pg 27  
Table 3-7  
A conservative cost estimate for this typical allotment range improvement project is nearly \$350,000. (10 mi. of fence @ \$3.50/ft, 1 ea cattle guard @ \$700.00, 1 ea corral @ \$250.00, .25 mi of stock trail @ \$4.00/ft, 5 ea reservoirs @ \$2,000.00 ea, 5 ea springs @ \$1,000.00 ea, .75 mi of pipeline @ \$7,000/ft, 400 acres of vegetation manipulation @ \$200.00/acre, 100 acres of seeding @ \$300.00/acre) This is \$70.00 per acre on a 5,000 acre allotment. Who is responsible for the cost of these improvements and have they agreed to pay this expence?
15. Chap. 3 - pg 32  
Recreation Resource  
Management para 1  
Recreation areas should be managed with an open mind to the multiple-use concept of public lands. Mineral development and other uses can co-exist under certain conditions. Frequently the reclamation of a natural resource development enhances the area for recreation or for wildlife habitat. Blanket exclusions are wrong.
16. Chap. 3 - pg 32  
Recreation Resource  
Management para 5  
Are the co-operative agreements to be developed to include cost-sharing, and if so do the different agencies involved support the additional financial strain to be added to their budgets?
17. Chap. 3 - pg 33  
Cultural Resource  
Management Objectives  
The standards are ambiguous. ("protect the cultural and historical values ..... from accidental or intentional destruction and give special protection to high value cultural resource sites") Existing practices have too adequately protected these resources.
18. Chap. 3 - pgs 34 & 35  
Wilderness Management  
The objective statement should include language to indicate possible coincidental use with mineral and other development investigations if practical. Management actions should positively consider the multiple use recommendations of Congress. The Minerals Policy Act of 1970 should be cited. No additional wilderness study areas or wilderness areas should be designated until complete policy and economic costs are established. Existing regulations and constraints are more than enough to protect other fragile and unique resources.

#### RESPONSE TO COMMENTER 23

Thank you for your comments.

#### Response 1

If a WSA is designated as wilderness by Congress, it would be managed according to the Wilderness Act of 1964 and the BLM's wilderness Management Policy which provides guidance on activities that are permissible within a wilderness. The management of each WSA under each alternative is described in Chapter 2 and the impacts on mineral development are described in Chapter 4. The economic costs of allowing or prohibiting mineral development were excluded from detailed analysis in this document because no mineral development is anticipated in any of the WSAs.



Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 5 14 December 82

19. Chap. 3 - pg 37  
Visual Resource Management - Actions para's 2 & 3      What is the definition of "full protection for the visual resource?  
The Deep Creek designation is of questionable merit with the approved C.F. & I, limestone quarry adjacent.
20. Chap. 4 - pg 63  
Erosion Conditions para 7      Fire damage is probably the primary factor contributing to erosion. Substantial impacts can be made on potential fire damage through coordinated management planning. For instance, off-road vehicle use could be coordinated with improved access to potential high fire damage areas. Both road construction and location could be beneficially impacted with such a coordinated approach.
21. Chap. 4 - pgs 67 & 68  
Minerals, Locatables      The BLM's inventory of locatables must be nearly non-existent. Minerals listed by Minobras in the publication Industrial Minerals / Colorado and Utah include barite, clays, gypsum, limestone, pumice, and sillimanite. Other valuable minerals which should be considered are anhydrite, dawsonite, nahcolite, and ordinary sand and gravel.  
What is the definition of "recreational value of metals"?  
It appears a scenario is being constructed to further restrict if not halt the development of our nations natural resources.
22. Chap. 4 - pgs 68 & 69  
Table 4-8      What does the asterik denote?
23. Chap. 4 - pg 69  
Terrestrial Wildlife, Habitat and Related Species para 1      If public land for wildlife in the resource area is in short supply for present wildlife use, and manages only due to supplementary benefits provided wildlife use on private land, then why introduce more to compete for less? Utilize to maximum potential what is available in a balanced management plan. This may allow introduction of additional or new species if resources become available.
24. Chap. 4 - pg 69  
Terrestrial Wildlife, Broadleaf Tree Riparian para 3      What is the documentation of "severely impacted by road construction, gravel extraction, water diversions and livestock grazing."? I suggest children with B-B guns, young people on woodies, and both legal and illegal shooting more severely impact the riparians in habitat.
25. Chap. 4 - pgs 70 & 71  
Big Game      I understand that much private land is utilized by wildlife, but to include the benefits of these private resources in order to justify big game populations is to establish an improper baseline for any wildlife guidelines.

Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 6 14 December 82

26. Chap. 4 - pg 71  
Threatened and Endangered Species para 2      The vast majority of land along the lower Colorado River and along the Roaring Fork River is private. The BLM would do well to encourage alternate means of providing for endangered or enjoyed species, working in cooperation with private landowners. The onus of contact with individual private owners is upon the public - the BLM as its representative - and not upon the private sector.  
I believe state agencies such as the Mined Land Reclamation Board has worked quite effectively in this manner.
27. Chap. 4 - pgs 74 & 75  
Recreation Resources      I complement the team for their sound definition of "Setting Opportunity" for the primitive opportunity class. Too frequently a wilderness designation is considered imperative in order to meet primitive requirements. Anyone who has done much out-of-the-way hiking or backpacking knows this is not true.  
I'm sure most visitors preferences will tend toward primitive, it is the "in thing" now, but how many will take the opportunity available to them and properly utilize these settings? We still find a plethora of cigarette butts and packages, used film packs, beverage containers and other rubbish in ample supply. I trust this is not a true picture of societies concern for primitive or semi-primitive settings.
28. Chap. 4 - pg 75  
Table 4-13      1980 Garfield County Population figure should be 22,464, not 13,320.
29. Chap. 4 - pg 78  
Land Use para 1      I charge that many farmers and ranchers must support their agricultural roots through second jobs (as suggested in Table 4-15 for models I and II) and many former agricultural holdings were unable to support their continued existence. This is the primary and most significant determinant of shifting land use patterns. How has government assistance (or interference) helped the plight of the small family operated farm or ranch? Do you suppose there is some validity to studying and utilizing knowledge from American History?
30. Chap. 4 - pg 79  
Table 4-16      Private land does not total 1,279,506 acrea or its county breakdowns as shown. This is a total for both public and private land.
31. Chap. 4 - pgs 80 & 81  
Wilderness Values      I commend the study team for its sensible recommendations of wilderness designations.
32. Chap. 4 - pg 81  
Visual Resources Scenic Quality para 1      What impact will the designation ACEC have on mineral development adjacent to an ACEC or have on access to private land which requires passage through an ACEC? I question the ACEC designation, especially for visual resources. The BLM has adequate tools for controlled management without additional designations. This has been too amply demonstrated in the past.



Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 7 14 December 82

33. Chap. 4 - pg 82  
Transportation Roads  
para 4  
The large areas of land along the upper Colorado River between Gotsoro and State Bridge which are legally inaccessible to the public are still recommended for intensive stream management. If public has limited access, whom does the cost of intensive management benefit?  
The closing of access by private landowners is generally in response to a public few who totally ignore their responsibilities. Trash remains, gates are opened and left open, and vehicles are parked such that further access is denied or hindered. These and other obnoxious habits force the closings in order for the landowners to protect their rights.
34. Chap. 5 - pg 83  
Introduction para 1  
The introduction statement calls for disclosure of economic consequences. Economics is concerned with the production, distribution and consumption of wealth. Wealth, in this document, should be concerned with the value, as measureable in price (unless there is a better measuring device), of the study areas natural resources and infrastructure, especially as it effects the areas human resources. Nowhere in the document have I been able to locate these economic analyses.
35. Chap. 5 - pg 84  
Critical Watershed  
Assumptions para 1  
Stipulations should provide for trade-offs or for other water exchange provisions.
36. Chap. 5 - pg 84  
Mineral Assumptions  
Mineral values can only be identified following a comprehensive exploration program. Lets leave the options open until either private enterprise or the BLM has been able to identify and inventory these natural resources. This posture should hold regardless of land tenure proposals or disposal status.
37. Chap. 5 - pg 86  
Social and Economic  
Conditions Assumptions  
Livestock Grazing  
What is the correlation between projected allocations Table 3-6 and potential allocations on Tables J-1, J-2, J-3, and J-4?
38. Chap. 5 - pg 87  
Visual Resource  
Assumptions  
The concerns expressed by this document towards our (the public's) resources of land, water, vegetation, animal, and other (?) visible ones is commendable. But is it necessary to re-identify and re-classify those resources which are adequately covered by other management protection measures? This is a ploy, in my humble opinion, to establish another level of bureaucracy within the BLM. Next we would have a Director of Visual Resources. Followed by appointments of Administrative Directors of Land, of Water, of Vegetation, of Animals, and of Other Visual Resources. (Possibly the Department Director could initially handle the administrative duties of Other Visual Resources if his executive staff support was increased.)

Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 8 14 December 82

38. continued  
Obviously my fear of creeping federalism has been exposed, but the possibilities, though subtle, are surely evident are they not?
39. All bound maps  
A definition of public land holdings within the resource area should be shown on each map in order to better depict the impact or magnitude of management proposals.
40. All Maps  
The capability unit boundaries are not valid.
41. Map 3-5  
Erosion hazard area exists E by S-E of Glenwood Springs. (See comment Item 10).
42. Map 3-6  
Roaring Fork River corridor is nearly all private land. How has the BLM determined it's rights of designation and management along this corridor as shown in green on this map. Same is true to a lesser extent along portions of Eagle River and upper Colorado River.
43. Map 3-7  
I question the soundness of Deep Creek designation.
44. Map 3-8  
Lower Colorado River corridor is primarily private land. How has the BLM determined it's rights of designation and management along this corridor as shown in green on this map?
44. Map 3-9  
A check with Map 4-1 will prove that some private lands are included within management designation areas (re: T6S, R 90 & 91 W). As noted, if all maps had some indication of public land holdings this type of error would less likely occur.
45. Map 3-10  
Egeria Creek is principally surrounded by private land holding. For whose benefit is the aquatic habitat management proposed?
46. Maps 3-11, 3-12 & 3-13  
Rock Creek and Egeria Creek are very poor selections for peregrine falcon introductions. The railroad goes through and across this area and there is a track maintenance area here which requires substantial vehicle traffic in addition to the train traffic. Further decreasing the value or attractiveness of this area for tiercel or falcon (of the genus falco peregrinus) is the active year-round mining at Crater. If in fact such mining activity does not bother wildlife, particularly the raptors, then why has it been accused of severe negative impact, frequently suspected of causing abandonment of feeding and nesting areas? Your proposals are at cross purpose.  
Deep Creek with it's approved limestone quarry nearby is also a poor selection for terrestrial habitat enhancement through introduction of new species.



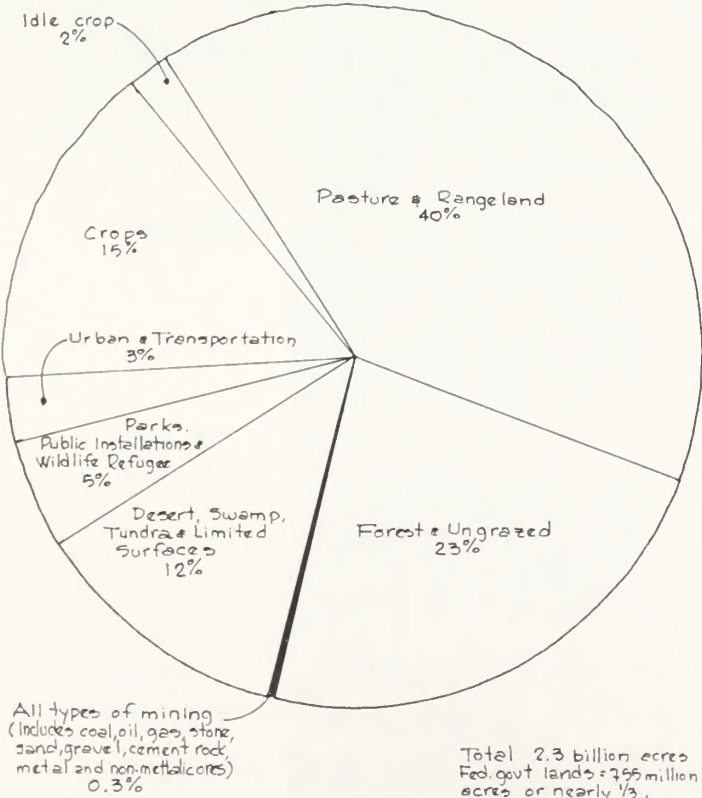
Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 9 14 December 82

47. Maps 3-19, 3-20, 3-21 and 3-22 No matter how obsequious or commendable the recreation opportunity spectrum settings are, they should be confined to public lands. The BLM has no rights over private land unless specifically retained when the land originally obtained private status from the public body.
48. Maps 3-25 & 3-26 I certainly question the righteousness or justification of encouraging a proposed trailhead, and it's obvious impacts of snow-mobiles and all the support facilities they require, upon private land. What is the BLM's reasoning in this regard? Essentially no such facilities are proposed for the upper Colorado River area. Some location near Crater (with its year round mining activity and accompanying traffic and noise) seems to lend itself to this type of use. In addition, you help provide some recreationally opportunities to this end of the resource area.
- 2 49. Map 3-27 The Bull Gulch possible wilderness management proposal indicates isolation of some private land holdings along the Colorado River. What protection is given to the rights of these private land owners?
50. Map 3-28 I feel adequate management tools are available to the BLM without adding another "critical" designation to manage.
51. Maps 3-29, 3-30 & 3-31 Blanket designation on both private (56% of the area) and public lands is beyond the scope of the BLM's responsibilities or rights. I recommend that the Visual Resource Management proposals be dropped. Reasonable safeguards are already in place to provide BLM with needed management strategies.
52. Maps 3-32, 3-33 & 3-34 In general I encourage the sales of all parcels which are totally surrounded by private land or in other ways do not accommodate the public's use. I feel it is in the public's interest to get the lands onto the tax rolls and further I believe better productive utilization of the resources is made by the private sector. Public land which provides the only reasonable access to other public resources should not be sold. A close review is called for prior to disposal in order to verify disposal beneficially serves the public.
53. Maps 3-35, 3-36 & 3-37 Off Road Vehicle management should recognize the legitimate needs of agricultural and mineral requirements as opposed to recreational requirements. Standard restrictions on all traffic is not proper. Classifications or other provisions for the legitimate access needs of agriculture and mineral resources should be made.

#### Response 2

The Bull Gulch WSA does not contain any private land inholdings and does not affect access to private lands adjacent to its boundaries.

Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. enclosure



SOURCE: LAND USE - NATIONAL COMM. ON MATERIALS POLICY 1973 pg 2



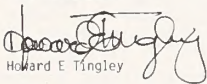
Tingley's comments on BLM Glenwood Resource Area Draft E.I.S. pg 10 14 December 82

54. Maps 3-42, 3-43 & 3-44 Designations have again been made upon private land. It is unacceptable for the BLM to visit the public's needs upon private landowners rights. There is no Chapter 3-26. Reference must have been intended to be Table 3-26. Some designations do not correlate well with existing or approved use. Raptor concentration (?) and peregrine falcon introduction near Crater and Deep Creek; sensitive zone designation on Rock Creek and Egeria Creek near Crater; primitive and natural values on Deep Creek; to mention a few. With all the raptor concentration areas shown, why are we in need of additional introduction? These maps now indicate a plethora of native habitat sites which become unsuitable for other uses. The Colorado Division of Wildlife would lead us to believe that coyotes are an endangered species. I suggest a more sincere approach to Terrestrial Habitat Management.

My brief review of this draft E.I.S. has induced me to support a Continuation of Current Management concept. Questions, errors, inconsistencies and lack of any economic analyses strengthens my resolve. Certain elements of each alternative may be warranted, but without cost and benefit analyses I find it impossible to weigh the values of options presented.

At such time as these economic analyses are available I would appreciate the opportunity to again review your proposals.

Very truly yours,

  
Howard E. Tingley

1415 14th Ave  
Glenwood, Colorado 81602  
December 11, 1982

Mr. Jack Albright, Manager  
Glenwood Springs Office, BLM  
P.O. Box 1009  
Glenwood Springs, Colo. 81602

Dr. Mr. Albright:

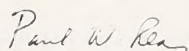
I write to express that recommendations for wilderness designation made by your office fall considerably short of what could and should be done. As you know, the Glenwood area, with its proximity to Aspen, Grand Junction, and the I-70 corridor, is one of the most congested and fastest-growing areas on the Western slope. This means that we must plan now to insure that very special natural areas remain unspoiled, both for the residents of the area, and for the tourist who come to recreate. The Flattons and Hanging Lake areas, for instance, serve people from all over the country, but are already becoming quite crowded during the summer.

For these reasons, I deem your office's recommendations woefully inadequate and short sighted, since they include a mere 330 acres of the tens of thousands made your jurisdiction. To remedy this omission, you might re-consider the following three areas: Full Gulch of the primitive Colorado River and side canyon areas which include a range of ecosystems rarely represented in our wilderness preserves. Another omission worthy of re-consideration is the Black Lake area, which has little lumbering potential, and great recreational, scenic, and wildlife values. It would also expand the crowded Flattons, ending access.

But more than any other, I would like to urge wilderness protection for the Castle Peak area. While the area does have some timber potential, one must also recall that the Forest Service is a net generator of revenue from timber sales in Colorado, and that re-forestation of the Castle Peak area would probably prove difficult and expensive, given the loose and rocky soils in this area. The Castle Peak area is a gem, with impressive stands of conifers and aspen, alpine meadows with a fine array of flowers, and stunning rock formations.

I urge that your office consider these areas for wilderness designation, and that this letter be made part of the hearing record. Thank you.

Sincerely,



RESPONSE TO COMMENTER 24

Thank you for your comments.





## Sierra Club

Rocky Mountain Chapter  
2230 F. Colfax Ave.  
Denver, CO, 80206  
Dec. 29, 1982

TO EXPLORE, ENJOY AND PRESERVE THE NATION'S  
FORESTS, WATERS, WILDLIFE AND WILDERNESS

Alfred Wright, Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, CO, 81602

Dear Sir:

The following comments on the GSPA DEIS and Wilderness Technical Supplement are made on behalf of the Rocky Mountain Chapter of the Sierra Club. We have more than 6000 members in Colorado who use and enjoy public land in general and wilderness quality land in particular, and hundreds of other like-minded members who reside in other states and chapters but come to Colorado for recreation. These comments supplement those made orally at the hearing in Denver December 14 and should be entered into the hearing record. Page numbers, Tables etc. referred to in these comments are from the DEIS unless otherwise noted.

### General Comments

The Preferred Alternative (PA) of the Resource Management Plan (PMP) is severely and unjustifiably skewed toward motorized recreation, timbering, livestock grazing, and water yield, and severely biased against wilderness and non-motorized recreation. We believe that this PA is contradicted by the following considerations in the DEIS itself:

- The public appears to favor the primitive and semi-primitive non-motorized recreation opportunity spectrum classes over other types.
- Timbering is proposed to be done at levels considerably above regional needs for firewood and sawtimber, and will have adverse effects on other economically and esthetically important outputs like wildlife, water quality, and primitive recreation.
- Livestock grazing is a minor contribution to the region's economy, and has been declining because of population growth on the higher quality grazing lands, yet it outcompetes hunting and other types of wildlife-dependent recreation of greater economic importance in FLM's formulation of the PA.

Normally, we would expect the BLM to choose an alternative somewhere between the environmentalists wish-list (e.g. the Resource Protection Alternative, RPA, which we do generally support) and the local Chamber of Commerce wish-list (e.g. the Economic Development Alternative, EDA). However, in choosing a PA that is outside this bracket, beyond even the EDA in some respects, the BLM is saying that it would like to pursue goals

that are neither ecologically nor economically sound, and which bear little relation to public needs. In our view this is both bad planning and bad land management, and is not justified by any arguments that we can find in the DEIS. We particularly protest the cavalier treatment given to 3 of the 4 WSAs (late word has it that even Eagle Mountain and the bits and pieces of Hack Lake will be dropped because of DOI policy changes). The PMP should adopt its RPA for wilderness.

Finally, the PMP has included no figures and has undertaken no discussion of proposed budgets for any of the alternatives. The National Forest Service performs such analyses in its plans and the PMP should do likewise. Why even discuss alternatives that require more funding than is likely to be available?

### Specific Comments

#### Water Quality

- 1 Water quality problems in the Milk and Alkali Creek drainages would probably not be improved by the timbering proposed in the PA for the Castle Peak WSA. If poor quality is due to an erosion-prone soil, then surely keeping existing vegetation intact, water run-off reduced, and livestock away from stream banks would help (p. 16).

#### Water Yield

- 2 Water yield and water quality enhancement efforts for the area around Castle Peak are in conflict (maps 3-1 and 3-4): an increase in yield cannot but increase soil loss, suspended solids, and dissolved solids. However, the level of effort proposed for the PA (Table 3-1) compared to the RPA or the EDA is an improvement, though the level in the CCMA is better still. The reason for this, as map 4-4 makes clear, is that practically the entire GSPA has easily-erodible soils. In light of current water quality problems in the Colorado River (and the great effort and expense of government agencies to combat them) it seems prudent to us to give water yield a lower priority in the PA.

#### Critical Watersheds

BLM does not appear to offer enough protection for Critical Watersheds in the PA (Table 3-2), although certainly more than under current management. We believe that in such watersheds, CRV and road travel, timbering, grazing, water yield activities and oil and gas surface occupancy should be strongly curtailed or prohibited. High erosion hazard areas seem to be given least protection of all, and municipal watersheds are not protected from the road erosion and harmful drilling fluid residues associated with oil and gas development. It is therefore not obvious to us that effects attributable to the PA (p. 19, col.2) will in fact occur.

#### Minerals

- 3 All municipal watersheds and high erosion hazard areas on map 3-5 should have "no surface occupancy" stipulations on leases. The same is true for scenic and recreational lands like those around Castle Peak. Such stipulations would make the RMP conform more closely to local plans

### RESPONSE TO COMMENTER 25

Thank you for your comments.

#### Response 1

The majority of the timber harvest proposed in the Castle Peak area is in watersheds tributary to the Colorado River not in the Milk or Alkali Creek drainages. In general, soils on which timber stands occur in the area range in erosion hazard from moderate to high. Consequently, significant impacts would not occur because standard operating procedures for timber harvest and its associated road construction would be complied with. Water quality problems in the Milk and Alkali Creek drainages originate outside of the WSA. Site-specific activity plans for improving water quality in these drainages have been prepared.

#### Response 2

No significant impacts to water quality would occur in watersheds around Castle Peak under the Proposed Action in this FEIS. The soils in sites considered suitable for increasing water yield range in erosion hazard from moderate to high. Under the RMP, aspen areas will be managed by the forestry program and any clearcuts will be allowed to regrow rather than be subject to conversion to grass. Because aspen is a prolific sprouting species, any impacts to erosion or water quality would be very short-lived. In addition water quality from the aspen and timbered areas in the upper watershed is of high quality. Any additional water developed from aspen treatment should also be of high quality and may have a small dilution effect on the poor quality water originating lower in the watersheds. The water yield recommendations have been included as design features under the forest program and would be implemented to the extent possible in projects proposed by the forestry program.

#### Response 3

The municipal watersheds and high erosion hazard areas are designated for no surface occupancy under the RMP. Because the Castle Peak area appears to have low mineral potential and because other management objectives did not require such an action, it was not felt necessary to impose this restriction. A seasonal restriction has been imposed to protect wildlife.



which seek to protect recreational lands in general and scenic corridors like that along I-70(p. 20).

The statement on p.67 that limestone production is to increase more than ten times on BLM lands in the next few years deserves more extensive comment in the DEIS. Why the dramatic increase? Where will the mining occur? In any part of the Glenwood Canyon Scenic Corridor? What will be the impacts?

#### Terrestrial and Livestock Grazing

The discussion of grazing on pp. 72 and 76 is enlightening and contradicts the emphasis on this activity in the PA. For example, we learn that the range in the GSRA is in a generally declining condition from past overgrazing (pp. 56-57 state that 128 of the 253 allotments are overgrazed), that considerable efforts would have to be expended (public money?) to improve the range condition, that the livestock industry is not a particularly important part of the local economy anyway ("agriculture represents a small and declining part of the economy"), and that only 7% of the livestock forage need is provided by BLM land. This situation is ripe for a careful cost-benefit analysis of the sort allegedly advocated by the present Administration. Will grazing fees pay for the necessary vegetation manipulations, riparian zone fencing, and other range improvements? If not, how do the present fees of \$1.45/AUM compare with grazing fees (or costs) on private range of comparable quality in the region? Factoring in these questions, and considering that livestock enhancement conflicts with wildlife (which is already suffering from reductions in winter range), and considering further how much more the local economy is enhanced by wildlife-based recreation than by livestock production (compare the socio-economic impacts of the PA and EPA on pp. 175 and 127, respectively), it appears that only the EPA of all the alternatives makes overall sense. The BLM should bear in mind that the GSRA is changing rapidly from an agriculture- to a recreation/tourism-based economy. In its PA, the BLM is attempting to keep afloat the moribund segment of a local industry by reducing the recreational opportunities for the vast majority of the public, both permanent and visiting. With the encroachment of development on existing wildlife winter range, it is imperative that BLM give a higher priority to the preservation and enhancement of wildlife forage on its lands. Ironically, as the EPA discussion indicates, improved wildlife forage benefits livestock in the longer term.

#### Forestry

Forestry is another example of a rather minor local industry given more perks in the PA than are necessary at the expense of economically and politically more important resources. The first question that must be answered (and which is not in the DEIS) is: What is the real demand now and in the future for fire wood and sawtimber? Apparently, a harvest of only 0.7MMBFY (p.122) and 1000 cords of firewood (p.73) is necessary to meet local demand, although it is not made clear whether this is the total demand in the area or only that which BLM supplies. The 0.7MMBFY

figure is itself contradicted elsewhere (p. 171, where 1.8MMBFY is declared to "meet local needs"). It is also stated that little commercial harvesting of BLM timber has taken place (p. 73), that market conditions "have been poor for several years", and that the one sawmill in the region has shut down, presumably for lack of business (p. 76). Why, under such conditions, the BLM plans to double or treble the allowed harvest over and above needs in the PA is not explained. No doubt any timber sold will be substantially discounted, and so compete with sawtimber and firewood from private lands--hardly an example of the much touted "good neighbor policy"! It should also be pointed out that firewood use will not increase as fast as the population in the GSRA because of present wood-burning-related air pollution problems in urban areas like Vail and Aspen.

An important forestry issue is the use of the 40 degree slope cut-off for timber harvest suitability. Harvests on such steep slopes will not only be expensive, but also will lead to serious soil erosion. Proposed harvests in some alternatives for greater than 40 degree slopes are absolutely unconscionable in our view--how can the BLM justify the environmental havoc that would be caused by such harvests? In addition to a smaller slope cutoff, the BLM should also use a site productivity index to identify suitable timber lands: we suggest an index of at least 20 cubic feet per acre per year.

Use of selection cutting should be qualified. This method can lead to high-grading and deterioration of the genetic quality of the trees on a given site unless healthy and vigorous seed trees are left for re-vegetation. Of course, snags for wildlife and small (only a few acres), irregular cuts should be used where clear-cutting is the technique of choice.

Bull Gulch and Castle Peak WSAs will both suffer from proposed timber management policies in the PA. On map 4-2, the erosion condition class of the Castle Peak area is poorer than that in the King Mountain area, suggesting that any timbering should be done there first. The omission of 4786 acres of the Bull Gulch WSA from the semi-primitive non-motorized recreation category (p.177) because of timber harvest is not warranted by the somewhat scattered and hard-to-access fuelwood resources of the area (map 3-18). Allowing primitive non-motorized recreation in Castle Peak for the same area that is planned for timbering in the PA is not consistent--people do not recreate in clearcuts! We believe that the primitive and natural qualities of the Castle Peak area dictate that BLM put this area into the Fire Management or Fire Suppression categories, not Fire Exclusion. Fire is a natural part of any undisturbed ecosystem, and prescribed fires at appropriate times might reduce the fuel load--timbering, unless the slash and downed timber is removed, will not.

We conclude that the BLM has not made a convincing case for any substantial amount of either timber or fuelwood cutting in the GSRA, with the possible exception of the already cut King Mountain area. Other lands should be left unharvested for their recreational, watershed, and wildlife values. It might also be mentioned here that clearing areas with a lot of downed timber (e.g. Castle Peak) removes cover for game animals like elk. This was a bone of considerable contention in a recent Forest Service sale on the east side of the Flattops.

#### Recreation/Wilderness



The RMP places enormous emphasis on motorized and semi-primitive motorized recreation and shockingly little emphasis on primitive and other non-motorized recreation opportunity classes and wilderness. This emphasis cannot be justified for the following reasons:

- a). More than 30 times more land is devoted to all motorized recreation classes than to non-motorized, and about 80% of the land area in the GSPA is open to ORV use in the PA (p. 31, Table 3-16), which is even worse than under a continuation of present management. Yet p. 75 states that public land users prefer essentially the kind of "primitive and unconfined recreation" that the Wilderness Act speaks of. Again, on p. 85, we find that public lands users prefer primitive and semi-primitive non-motorized PCS classes. Although nowhere is it explained how this public sentiment was ascertained, if one takes this information at face value, then BLM would actually have to reverse the ratios cited above for PCS classes to meet the real needs of the public for recreation. Certainly all wilderness quality land remaining in the GSPA would have to be recommended for Wilderness. The paltry acreage that FIM has recommended in the PA is scandalous and is even worse than that in the CCA and EPA. Recent DOI decisions will reduce the recommendation from an amazing 1% to 0%.
- b). Non-motorized, and especially wilderness recreation is cheaper to manage and has fewer environmental impacts than motorized types. Roads do not have to be maintained, access needs are minimal, and even trails are unnecessary. In fact, the less the wilderness is tamed by all these amenities, the more like real wilderness it becomes. Among the many charms of the Castle Peak and Bull Gulch WSAs are the difficulty of access, which requires more perseverance and imagination on the part of the hiker, and the lack of trails, which exercises orienteering skills. These areas are like the "mountains without handrails" that approach our ideals of what wilderness should be like. And of course, foot traffic is much less likely to cause the soil damage and erosion problems inherent in RV and ORV recreation.
- c). The assumption on p. 86 that additional wilderness use in BLM wilderness would only be "displacement" use ignores the fact the increasing use has strained present wilderness areas to the saturation point and has thus reduced the wilderness experience for those users. Therefore, BLM wilderness in what now has become the Rifle-Vail-Aspen "recreation corridor" would serve to accommodate "overflow" not "displacement" use.
- d). The statement is often made in this and other BLM documents that a WSA is not a "unique wilderness resource". This is too parochial a view. What may not, in fact, be a stunningly unique area by Colorado standards (e.g. Castle Peak WSA) is unique enough considering the country as a whole and will seem marvelous indeed to the visitor from the Flatlands. BLM manages lands belonging to and whose management is paid for by the whole U.S. public, not just the Colorado public or the local economic interests. Hundreds of thousands of this general public visit Colorado each year to view its natural and mostly public wonders.
- e). Map 3-20 apparently indicates that BLM would like to see a sub-

#### Response 4

Page 75 (DEIS) contains an editorial error and should have read "...those settings that are more primitive in character."

Preference information comes from an inventory done by Colorado State University. A copy of the report is in the resource area files. Overall, inventory information indicates a high preference for those settings that are more primitive in character, but this preference also generally includes the semi-primitive motorized setting. In addition, preferences by various activities including hunting, fishing, and picnicking indicate similar preference for settings ranging from primitive to roaded natural.

Furthermore, the large supply and variety of ROS settings on the White River National Forest reduce the significance of changes on public land.

Generally, the physical environment (remoteness, size, landscape alterations) limits the capability of an area to provide a setting opportunity more toward the primitive end of the spectrum. Thus, it would be difficult, if not impossible, to change an existing setting to a more primitive setting (for example, a roaded natural setting to a primitive setting).

#### Response 5

The U.S. Forest Service estimates the carrying capacity of seven wildernesses on the White River National Forest will not be reached until about the year 2000 (Draft Environmental Impact Statement for the White River National Forest Land and Resource Management Plan). Estimates indicate wilderness recreation use of the four WSAs, if all were designated as wilderness, would be less than one percent of the total use in the local region and would not be significant in satisfying future wilderness recreation demand.

In the context of the comment, "overflow" is synonymous with "displacement" as used in the DEIS and FEIS on the RMP since both terms refer to a shift in the location of use.

stantial acreage shift from the semi-primitive motorized to the roaded-natural class. It seems implausible to us that even that segment of the recreating public that enjoys jeeping would find such a trend acceptable. We wonder how such a trend is compatible with resource protection and with a reasonable road maintenance budget.

#### Other comments on wilderness/recreation issues:

- a). The extra roads around, and access to Bull Gulch that appear on map 3-41 (compare to map 3-38) and the proposed ORV access to the southern section of the Bull Gulch WSA do not jibe with the present wild and natural qualities of this area. In addition, it is not understandable why BLM proposes in the PA to designate this area as Visual Class II (map 3-31), whereas in the EDA (map 3-30), this area is Class I. This casts serious doubt on the alleged virtues of purely administrative protections of primitive recreation areas.
- b). Map 3-37 lists the Castle Peak WSA as administratively set aside in the PA for "primitive non-motorized recreational opportunities" yet the green color says that ORVs are allowed. These are not compatible uses. ORVs should be excluded from this area. On the other hand, if the BLM is proposing motorized use, why does the jeep road presently on the eastern boundary of the WSA that appears on map 3-38, not appear on map 3-41?

Many of the problems and inconsistencies outlined above could be alleviated if the BLM changed its PA to something much closer to the RPA, but with perhaps even less road building and access purchase than occurs even in the latter. As the DEIS states on p. 177: "Wilderness values would be lost forever on 16,740 acres". We have far too little roadless land left in this country to find such a situation (in the PA) acceptable.

#### Land Tenure

The Sierra Club believes strongly that the Federal Government is now proposing to sell entirely too much of its "excess" land. This is also true in the GSPA. We believe that by far the first priority in any land tenure adjustments should go to exchanges, not sales. This is especially true in the GSPA because of the importance of many of the parcels to game animal winter range. If at all possible, scattered winter range areas should be blocked up so that their consolidated area covers the most crucial sections of the winter range. The statement on p. 175 that land sales may lead to a depressed local property market is yet another reason to reduce such sales to the lowest possible level. The total acreage adjustment should not exceed that proposed for the RPA.

We trust that the BLM will find these comments useful, and that the FEIS will adopt a more balanced approach to wilderness and public land management.

Sincerely,

*Kirk Cunningham*  
Kirk Cunningham  
Conservation Chairman



P.S. A statement was made in my Dec. 14th testimony that Castle Peak was a unique volcanic feature mentioned in Halka Chronic's "Roadside Geology of Colorado". This is incorrect. The feature referred to in the book is the Dotsero Crater.

cc Congressman Ray Kogovsek  
Congresswoman Patricia Schroeder  
Congressman Timothy Wirth  
Congressman Hank Brown

January 24, 1983

Jack Albright, Manager  
Glenwood Springs BLM Office  
P. O. Box 1009  
Glenwood Springs, Colorado 81602

Re: Wilderness Study Areas in Glenwood Springs Resource Area

Please make the following comments part of the hearing record pertaining to the above.

*I am writing this letter to urge BLM to give wilderness recommendations to the Bull Gulch, Hack Lake and Castle Peak Wilderness Study Areas.*

There is every reason to recommend Bull Gulch for wilderness designation. Its geologic formation (Maroon Sandstone), elk habitat, and multitude of wildlife types all qualify it. It was initially recommended, then rejected. Why? It is difficult for me to believe that, as BLM asserts, nothing will happen to this area. At least BLM is confused as to this. The BLM position is that there are no resource conflicts and that administrative protections are sufficient because nothing will happen, yet the Technical Supplement states that such management will facilitate timbering, off-road vehicle use, and mineral resource extraction. Administrative protections are always subject to change and do not provide the permanent protection created by a congressional wilderness designation.

Hack Lake is another case in which there are no mineral resource conflicts and in which timbering is uneconomical. It has strong primitive recreation and scenic values, as well as abundant wildlife. Its recreation value would add reliable revenue to the local economy. As with Bull Gulch, administrative restrictions as to mineral resource exploitation will not protect the wilderness values. Since there are no conflicts, this means the area is prime for wilderness protection by Congress.

The Castle Peak area is also well suited for wilderness designation because of its unique geomorphology, ecosystems, wildlife diversity, Class A scenic rating, and its watersheds.

A wilderness designation should not be foreclosed by plans for motorized recreation and timbering. These plans are more evidence of BLM's predisposition to manage its lands for the production of wealth rather than the protection of wilderness. There are ample opportunities for off-road vehicle activity in other parts of the Resource Area where there would be far less resulting damage. Since, together with ranching and other forms of recreation, timbering is already a substantial part of Eagle County's economy, further timbering in Castle Peak would be redundant; wilderness recreation in Castle Peak would add economic diversity. No National Forest in Colorado supports profitable timbering--it is all actually subsidized by taxpayers. Will Castle Peak be an

RESPONSE TO COMMENTER 26

Thank you for your comments.



exception to this pattern? Probably not. Moreover, the White River National Forest permits an adequate timber harvest absent the need to build the new roads which would be required in Castle Peak. Roads built in Castle Peak would worsen the steep slope soil erosion there, adding to the downstream silting problems. Similarly, timbering would probably leave severely damaged soil conditions on steep slopes, precluding successful revegetation. The riparian management plans for the area, as shown by maps, would conflict with timbering.

It is my understanding that the Eagle Mountain Area, which was recommended by BLM for wilderness designation, has now been withdrawn by the Interior Department. Why is Interior oblivious to the need for wilderness designation in this BLM Resource Area?

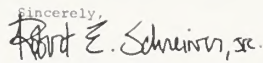
BLM is playing the same games in this Resource Area as in the White River area. An area is initially recommended for wilderness designation and then is withdrawn. Areas whose wilderness characteristics are not in conflict with any non-wilderness resources are not given the wilderness recommendations they deserve, but are consigned to management plans subject to change at any time. The basic problem here is one of values. BLM has engaged in philosophical trapeze acts in order to justify what it wants to do.

I have never quite understood why conservatives are afraid to conserve. What is so fearful about conserving the 9% of Colorado BLM lands which have wilderness characteristics? This is only about 1% of the total land area of the entire state. As shown by the recent study of economist Richard Walsh, the existing Colorado wilderness areas will cease to accommodate recreational pressures in roughly 25 years. Even if all of the wilderness lands in Colorado were quadrupled, the carrying capacity for recreational use would be reached in roughly 40 years. And only if all public lands in Colorado suitable for wilderness (about 15% of the state's area) were protected as such would the economic costs even begin to outweigh the benefits. The Walsh study shows there are indeed considerable economic benefits in wilderness. Each acre of wilderness is worth about \$81 to Colorado.

My own interests in this are essentially altruistic. I do not want to "lock up" these lands for my own pursuits. It is only the exploitative, non-wilderness alternatives for these lands which lock them up, usurping the options of future generations. A now-or-never greed occupies the land and excludes everything else. The reason we still have as many options as we have on both public and non-public lands is that no one before us squandered all of nature's legacy. When you leave the wild lands as you inherited them, you leave all the options for those who follow.

The enemies of wilderness find it incredible that anyone would see value in something that does not immediately create wealth or confer power. That is one of the tragedies of our age. I, and most of the people I know, in various walks of life, feel a strong need to know that there are places that are still free, are still right. Why should someone in the eastern part of Colorado care for lands in the western part?

Because there are people in board rooms far removed from this state altogether who view these lands and see only profit-and-loss statements. Wilderness belongs to us all--and to the future.

Sincerely,  
  
 Robert E. Schreiner, Jr.  
 1440 E. Quincy Ave.  
 Englewood, Colorado 80110

P. S.: I am not a hippy-dippy member of a radical fringe group attempting to take control of the central government. I have been involved in the real estate business in the Denver area for a fair number of years and have regularly done business with people whose conservative credentials would make Ronald Reagan look like a flaming liberal.



BENTON LAND AND LIVESTOCK COMPANY  
RANGES, EAGLE & ROUTT COUNTIES  
BURNS, COLORADO 80426

Jan 26, 1983

JOHN T. BENTON, PRESIDENT

Mr. Alfred W. Wright, Area Manager  
Bureau Of Land Management  
Glenwood Resource Area  
PO Box 1009  
Glenwood Springs, Colorado 81602

Dear Mr. Wright,

Following are my comments regarding the Draft Environmental Statement for the Glenwood Springs Resource Area.

It is evident that you and your staff have worked hard to make this document as comprehensive and factual as possible in the time allowed. Being a lifetime resident of this area, I can appreciate your efforts.

In regard to the Castle Peak and Bull Gulch wilderness study areas, I believe that you have made the correct decision in withdrawing both of these areas from wilderness consideration. As an adjacent landowner as well as a livestock grazing permittee, it is my opinion that wilderness designation for either Castle Peak or Bull Gulch would cause very substantial problems in grazing management for both the public and private lands in the area. It would also create additional problems for the adjacent landowners in regard to trespass and related "people problems". Further, it would abrogate the multiple use concept of Public Lands which has worked very well for this area.

In regard to grazing allotment units 8610, 8611, 8612 and 8613 and the proposed reductions in domestic livestock AUM's. It is my opinion that somehow greatly inflated numbers for big game forage requirements have been introduced into this part of the study. Following are my computations which bring me to this conclusion. Using the factors for converting cow AUM's to elk AUM's of 2.6 elk/cow and deer of 9.5 deer/cow results in a total of 3708 elk AUM's and 13,547 deer AUM's. If a further assumption is made that the average winter period requirement for these grazing allotments is three months, then there would be 1236 elk or 4515 deer using these allotments during the winter period. These grazing allotments are a portion of Division of Wildlife game management unit No. 26 which encompasses an area bounded by State Highway 131 on the North and East, Derby Creek on the West and the Colorado River on the South. Obviously the grazing allotments are a very small part of the total GMU No. 26. Division of Wildlife estimates of big game populations on a five year average of the entire unit are 1398 elk and 2983 deer. Thus, there is certainly a large discrepancy between big game forage requirements proposed for these allotments and total numbers estimated by the Division of Wildlife. To my knowledge there have not been any range utilization transects done on any of the units; however, even a casual observation indicates an improving trend in forage production over the past ten to fifteen years.

RESPONSE TO COMMENTER 27

Thank you for your comments.

#### Response 1

The Castle Peak WSA was determined to possess wilderness characteristics as defined in the BLM's Wilderness Inventory Handbook during the wilderness inventory completed in 1980. In the scoping process for this FEIS, it was determined wilderness designation would not significantly affect livestock grazing. Under the BLM's Wilderness Management Policy, existing grazing, including maintenance of existing range improvements, can continue. In addition, the allocation of AUMs to livestock as established in the RMP would not be affected.

Mr Alfred W. Wright page 2

Another consideration is the substantial amount of private land in GMU No. 26 and whether any allowance was made for the amount forage provided on private lands for the big game herds. Lastly, cattle are accurately tabulated and exact use dates are established; whereas, tabulation of elk and deer are estimates only and the exact location and numbers of animals cannot be established by current methods.

My last comment is in regard to the transportation management section preferred alternative page 3-41 of the Map Addendum. The Castle Peak area appears to have a very extensive system of BLM maintained roads. I question whether the BLM has the funds available for acquiring rights of way, building and maintaining this road system. The proposed road system would certainly be a detriment to the landowners and permittees in the CP area due to the increased opportunities for theft and vandalism in the area. Certainly the multiple use concept is desirable and adequate access should be a goal. It seems to me that continuation of Current Management page 3-38 should be the preferred alternative.

Thank you for your time and consideration.

Sincerely yours,



John T. Benton

#### Response 2

The acquisition of access is necessary to implement the recommendations proposed for this area. These include forest management, wildlife management, and increased public access for recreational purposes. We have restricted off-road vehicle (ORV) use to designated roads and trails and feel this would help contain ORV damage. The potential exists for increased littering, vandalism, and ORV damage, but we feel this would be offset by the benefits derived from the above mentioned proposals.

Map 3-37 (DEIS) also shows the Castle Peak area as providing primitive motorized recreational opportunities. ORV use in the area would be limited to designated roads and trails which would provide for both motorized and nonmotorized recreational opportunities. The maps referred to in the comment identify roads proposed for BLM maintenance or the general location of proposed access acquisitions. The road on the eastern boundary of the WSA does not appear on Map 3-41 (DEIS) because the portion of the road north of Blue Lake was not proposed for BLM maintenance under the Preferred Alternative (DEIS).



## THE COLORADO RIVER &amp; EAGLE COMPANY

P. O. BOX 1199  
EAGLE, COLORADO 81631  
(303) 328-8371

January 31, 1983

Mr. David A. Jones  
District Manager  
Grand Junction District Office  
Bureau of Land Management  
764 Horizon Drive  
Grand Junction, CO 81501

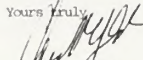
Dear Mr. Jones:

We have reviewed the Draft Environmental Impact Statement on The Glenwood Springs Resource Management Plan. The plan may have substantial impacts of private land owned by The Colorado River & Eagle Company which is located adjacent to these public lands under planning consideration. We therefore wish to make the following comments.

The Castle Peak area which will undoubtedly most affect our property is not designated as a wilderness. We support this conclusion and agree that it does not meet the wilderness criteria.

We are concerned with the increase in road construction and resulting uncontrolled access. The area appears to be adequately accessible and controllable at this time. Due to past management practice, the area has been properly cared for. These proposed significant changes may negatively affect this land. Protecting the private lands from trespass and destructive use has been a problem in the past and it appears that the proposed increase in vehicular traffic, particularly by off-road vehicles, will likely cause heightened problems from improper use.

Thank you for your consideration.

Yours truly,  
  
Chester M. Goldman,  
President

cc: Al Wright  
Terrill Knight

RESPONSE TO COMMENTER 28

Thank you for your comments.



February 1, 1983

Re: Draft Environmental Impact Statement for the  
Glenwood Springs Resource Management Plan

The Aspen Wilderness Workshop appreciates this opportunity to make comments on the DEIS for the Glenwood Springs Resource Area's Resource Management Plan. The Aspen Wilderness Workshop is composed of over 100 members who live in or near the Resource Area. We endorse the thorough, balanced planning approach taken in the plan and hope that more resource areas will be able to follow Glenwood's example. We were impressed with the professionalism shown in the scoping process but find this document somewhat confusing. Following are the issues on which we feel qualified to comment. We regret that we do not have the expertise to adequately critique the entire document. Please add these comments to the official record.

Wilderness Recommendations

The Aspen Wilderness Workshop is pleased that the Bureau of Land Management will be recommending wilderness designation for the Eagle Mountain Wilderness Study Area. However, this is the only aspect of the Preferred Alternative's wilderness recommendations that we do agree with. As our name implies, we are an organization of people who support the preservation of the precious little wild lands left in this nation. Colorado, and particularly the Glenwood Springs Resource Area, is fortunate to be the site of a good portion of this valuable resource. We are very disappointed that so little of this area's potential wilderness is being designated for permanent protection.

Regarding the assumptions made to analyze the environmental consequences of the wilderness recommendations, we feel that application of the economic values of wilderness mentioned in the 1981 Colorado State University study by Walsh, Gillman & Loomis would be appropriate to Wilderness Study Areas in this Resource Area. We also agree with this study that nondesignation of any wilderness study area will result in devaluation of that area both to those who use it and to those who may never visit the site. The non-market values of preservation, primitive recreation, opportunity for solitude and nature study, wildlife observation and appreciation of scenic, natural beauty are valid and must be considered equally with market values such as grazing, timbering and mining.

The concept of multiple use implies that all uses be considered on an equal footing in reaching a decision of what are the best uses. Sometimes these uses are mutually exclusive, such as the use of land for timbering, or mining versus wilderness or recreation. The amount of land available for marketable resources is extensive compared to the amount of land available for wilderness in our public lands. This is especially pertinent in light of the fact that Wilderness Study Area boundaries

RESPONSE TO COMMENTER 29

Thank you for your comments.

Response 1

Use of the Walsh study was considered, but it was determined the values may not be appropriate for analyzing the four WSAs in the resource area because the Walsh study was not site-specific and because of the abundance of wilderness near the resource area and the relatively small acreage of the WSAs (see Chapter 1).

Nondesignation cannot be considered to cause an across-the-board devaluation of an area, nor does the Walsh study attempt to make that claim. Depending on the preferences of individuals, either nondesignation or designation could cause enhancement or devaluation of an area.



were originally drawn to leave out the richest mineral areas. The Glenwood Springs Resource Area contains approximately 1,280,000 acres of public, state and private land (p. 61, DEIS). 44%, or 566,000 acres (p. 1, DEIS), is public land managed by the BLM. Inventory has found that only 5% of this land has the characteristics to qualify as wilderness. This is only 2% of the entire Resource Area. If the Preferred Alternative's recommendations are enacted, the wilderness values will be lost on all but .03% of the area. We find it hard to believe that the American public cannot produce the minerals and timber that it needs from our region on the remaining 98% of this land.

The Aspen Wilderness Workshop does not believe the values of the Wilderness Study Areas can be adequately protected without wilderness designation. The Preferred Alternative assigns semi-primitive, non-motorized recreation management objectives to some of the Wilderness Study Area acreage. This administrative protection is too vulnerable to subjective interpretation. Any change of administrators could result in a change of interpretation of the objectives. Important decisions could be made affecting these regions without any opportunity for public comment. Under this arrangement, some of the areas would still be available for mineral exploration, with the possibility that claims would be made and ownership transferred to private hands. This would chop up the Wilderness Study Areas and create the possibility of roads and other "improvements" that would ruin their character. Again, the amount of acreage exhibiting wilderness characteristics in this Resource Area is such a small part of the whole that we cannot understand denial of complete wilderness designation.

#### Hack Lake WSA

The Aspen Wilderness Workshop would like to see the entire Hack Lake WSA recommended as wilderness. It is inappropriate to use topographical features as wilderness boundaries when land on both sides of the feature is suitable to be within the boundaries. The Hack Lake area, with its diverse wildlife and vegetation, virgin forests, varied topography and opportunities for recreation and solitude, is entirely worthy of wilderness designation. The BLM document states that the Forest Service had opportunities to designate similar areas as wilderness but did not do so. We contend this is all the more reason for the BLM to do so now, especially considering the diversity that wilderness below the rim would add to the System. Because of its proximity to the Flattops Wilderness, the Hack Lake Wilderness would be a compliment to and would be complimented by the existing wilderness. We would recommend transferring management of the entire area to the Forest Service so the two areas could be managed in conjunction. The good access to the Hack Lake area would facilitate use and management of the conjoined wilderness areas.

Wilderness designation for Hack Lake would protect water quality and quantity for this region. All evidence points to a total lack of economic mineral deposits. The lake is the habitat for a Colorado threatened trout species. The lower elevations of the area are important wildlife winter range. Hack Lake Wilderness Study Area offers semi-primitive non-motorized recreation and the BLM's own conclusions agree with ours that demand for this type of recreation is increasing, while opportunities for it are limited in this Resource Area. The historical significance of the Ute Trail through the area is another argument for wilderness designation. We believe that it

is likely that there would be other important cultural resources in the vicinity of this important route, supporting our belief that it is important to close the area to motorized recreation.

The Hack Lake Wilderness Study Area has an existing high natural quality. Evidence of human disturbance within the area is minimal and inconspicuous. Existing access to the area is good, facilitating manageability and public use. Wilderness designation would assure permanent recreation revenue to the local economy. While timbering would perhaps bring in larger sums initially, this would be short-term and the damage to the vegetation and wildlife of the area would be irrevocable.

In sum, we recommend that the BLM reconsider and grant wilderness designation to the entire Hack Lake Wilderness Study Area. Because it is a unique pocket of the Resource Area, small in size but next to the existing wilderness and a beautiful, diverse natural area, we feel there is no good reason not to recommend it for wilderness.

#### Bull Gulch WSA

The Aspen Wilderness Workshop supports wilderness designation for the entire Bull Gulch Wilderness Study Area. This area has a very high quality of naturalness and a unique primeval character. There are few traces of man and most of these are well-screened and would re-vegetate on their own once they were protected as wilderness. The Bull Gulch Wilderness Study Area is another opportunity to protect a special place for semi-primitive, non-motorized recreation. We agree with the comment already submitted stating that wilderness designation would allow or enhance more resources than it would restrict. (p. 68, Technical Supplement).

The Bull Gulch Wilderness would be an important asset to the National Wilderness Preservation System as a whole and to the Glenwood Springs Resource Area specifically. While it may be true that other Wilderness Study Areas in the West also offer the pinyon-juniper woodland vegetation type, their status is uncertain and the future of Bull Gulch should not be denied because of these other possibilities. Bull Gulch offers much, much more than just pinyon-juniper. Within its 15,000 acres are also found every ecosystem from riparian to aspen forest to spruce-fir and ponderosa pine forest. The unique opportunity of finding all these ecosystems in such close proximity, especially in an area undisturbed by man, makes Bull Gulch special and worthy of wilderness designation. Very little of the pinyon-juniper ecosystem is found in existing wilderness areas so Bull Gulch would compliment the entire Preservation System.

There is no evidence to indicate that marketable quantities of any minerals exist within the Bull Gulch boundaries; the terrain of most of the area is not conducive to mineral exploration or development without considerable expense and environmental damage; the amount of land to be set aside for the Bull Gulch Wilderness Area is insignificant when compared to the millions of acres of land without wilderness potential that still have not been explored for mineral deposits. Yet, in spite of these valid arguments, without wilderness designation, Bull Gulch has no guaranteed protection from future mineral development.



We disagree with the Preferred Alternative's goal of intensively managing so many of the grazing allotments in this area. It does not seem necessary to muddle with the naturalness of the area for the benefit of a few individuals. This region is important deer and elk range. Any vegetative manipulation should be for the benefit of wildlife habitat especially as hunting dollars are spread throughout the community. The BLM should not feel it has to try to meet every AUM preference goal.

The Aspen Wilderness Workshop questions the need to timber in the Bull Gulch Wilderness Study Area. It seems that the amount of marketable timber available for harvest is not significant, especially considering the permanent damage that would be done to this otherwise pristine environment. Also, given the state of the housing industry, it seems wrong to sacrifice an area like Bull Gulch when the demand could easily be met elsewhere. Local markets for fuelwood are not growing as rapidly as was once anticipated. This should relieve timbering pressure on areas such as Bull Gulch. We question the accuracy of the BLM contention that timbering would not affect the income generated by recreation. We feel that timbering would result in a degradation of the area what would leave it less attractive for recreation, thereby reducing local income.

We do not feel that the presence of the railroad tracks is a significant detractor from the wilderness values of Bull Gulch. We do believe it is important that natural areas like Bull Gulch and Hack Lake be designated as wilderness because of their proximity to population centers and their easy access as areas offering the public an opportunity to easily enjoy the "wilderness experience".

#### Castle Peak WSA

The Aspen Wilderness Workshop protests the Preferred Alternative's non-wilderness designation for the Castle Peak Wilderness Study Area. Others have made extensive comments objecting to this decision. We agree with these comments, but would like to add the following.

In making this recommendation, it appears the BLM is choosing timbering and motorized recreation over wilderness. In a time when no timber sales are generating a net profit, we question the rationality of this decision. Timbering plays a very minor role in the local economy whereas recreation and tourism play a much larger role. The BLM and others have stated that this resource area needs more opportunities for semi-primitive, non-motorized recreation, which is the increasing preference of people who want to get outdoors (p. 22, Technical Supplement). Furthermore, additional roads would require additional management to make sure vehicles are staying on those roads. Hunters may claim to want more roads for easier access to their game -- until the snows hit and they get stranded miles from anywhere. Then there are serious, life-threatening problems for the hunters, their families and their rescuers. There is also the expense, hassle, and environmental damage created in trying to dig out vehicles. A question of liability for these substantial expenses also exists. The game they are after also stands to lose from the constant stress associated with the building and use of these roads for timbering and jeeping. The demand for wood products can be met by an annual harvest rate of 0.7 million board feet from 52,305 acres of forest (p. 122, DEIS). This does not include the Castle Peak Wilderness Study Area so Castle Peak could be left as wilderness without affecting the timber industry.

#### Response 2

Demand for fuelwood in this region is relatively high, for both commercial distributors and the local public. Floatboating, fishing, and hunting are the major recreation activities that occur within and near the Bull Gulch WSA. Timber harvesting would have little, if any, effect on these activities, thus it would not affect the income produced by these activities.

Water quality problems already exist in the Eagle River. The DEIS indicates areas for water quality management to counteract these problems. One of these areas for management surrounds the part of the Castle Peak Wilderness Study Area that is targeted for timbering. The DEIS admits that this timbering would significantly increase erosion on the streams that empty into the Eagle River (p. 78, Technical Supplement). Therefore, it seems to us that the BLM is creating an illogical situation for itself by identifying one part of a watershed for water quality management while opening up contiguous acreage for increased sedimentation. The DEIS states that this increase in erosion would not be noticeable after 3-5 years following cutting (p. 78). However, the document also indicates the intention to allow 469,000 board feet to be cut annually (p. 79). Since 56,300,000 board feet have been designated for cutting, this erosion could go on for 125 years. This is not a short-term problem. The Technical Supplement also states that "alternative supplies of timber exist within and near the resource area" (p. 82.)

Even though streams of the Castle Peak Wilderness Study area may not currently be popular for fishing, Eagle River is. Timbering would ruin any fisheries potential within the area and would seriously jeopardize existing fishing along the Eagle.

We adamantly oppose opening up this potential wilderness area to this kind of destruction.

Wilderness designation for Castle Peak Wilderness Study Area would protect valuable riparian ecosystems. Only 1% of the Resource Area is riparian yet 75% of the wildlife species use it at some time in their lives. Most of this 1% is privately owned; therefore, we feel it is extremely important to protect this precious ecosystem wherever it is found in a potential wilderness area. Protecting this ecosystem will also increase waterfowl hunting opportunities in the Castle Peak Wilderness.

In response to comments regarding aircraft noise, we would point out that only in the northern or southern extremes of this globe is it possible to get away from the noise of airplanes. They are everywhere, this is a fact of modern life. Now that Rocky Mountain Airways has its own airport in Avon, there are no more scheduled flights into the Eagle Airport. As it is the general aviation field serving Vail and as Vail's main season is December through March, this is when Eagle experiences the most air traffic. The fact that most people visit wilderness during warmer weather reduces the impact of air traffic on the wilderness visitor. Also, summer air traffic is less likely to include the loud jets which would be most noticeable from the Castle Peak Wilderness. When Castle Peak is made a wilderness area, it will be indicated on aircraft charts and pilots would be required to avoid it or fly over it at no less than 2,000 feet above the ground.

In sum, we object to the non-wilderness designation of the Castle Peak Wilderness Study Area. We feel there are adequate opportunities for timbering and motorized recreation to be found elsewhere in the Resource Area. We cannot support the reasoning that timbering is necessary to avoid forest fires. Fires are nature's way of doing things and wild areas like Castle Peak should be left to nature. Besides, this "elective surgery" type of approach exhibits an anti-wilderness bias that is objectionable and inappropriate for the BLM. The Castle Peak Wilderness Study Area has all the natural qualities that merit its designation as wilderness.

#### Response 3

The great majority of the merchantable timber on Castle Peak lies in the drainages of Castle, Norman, and Catamount Creeks. These creeks are tributary to the Colorado River, not the Eagle River. The erosion hazard of soils in sites suitable for timber harvest ranges from low to moderate. The analysis in this FEIS indicates that significant impacts to water quality from sedimentation would not occur under the Proposed Action, even when the cumulative impacts are considered.

Most of the streams draining the potentially harvestable timber on Castle Peak drain into the Colorado River, not the Eagle River. The majority of the harvestable timber occurs on sites of low to moderate erosion hazard; consequently, minimal impacts to water quality would occur, particularly with the inclusion of the required management stipulations listed in Appendix 2. Therefore, no significant impact to either the Eagle or Colorado Rivers or their tributaries would occur.



The Aspen Wilderness Workshop cares about wilderness lands. We want to see the few remaining wild lands protected for ourselves, our children, and many generations to come. Unfortunately, unless groups like ours object, the present trend is to think only about today and allow short-sighted development to ruin the original, natural character of these lands. We must not let this happen. "Wilderness" is not a term that applies only to the spectacular peaks and ridges. It also applies to the "non-sexy" areas like Bull Gulch, Hack Lake and Castle Peak. There is no opposition to wilderness designation of these areas by local governments or residents. People today want more opportunities to get out in the backcountry and learn about nature's ways away from cars, developments and each other. These three wilderness areas are needed to increase the variety of options for this experience. They are all easy to get to so more people will be able to enjoy them. Their protection as wilderness will have value even to those not fortunate enough to set foot in them. Granting wilderness protections to all four of the Wilderness Study Areas will reduce the land available to mineral location and oil and gas leasing by 3% and 5% respectively (p. 22). It will only deny timbering on 3% of the land (p. 21). By the BLM's own admission, these percentages are insignificant amounts of the whole (p. 94, p. 161). Any of the other management suggestions are not adequate and will be no more practical or workable than wilderness. The BLM has been directed by Congress to protect this valuable American resource. This necessitates wilderness designation for the four Wilderness Study Areas in this Resource Area.

#### Visual Resource Management

The Aspen Wilderness Workshop disagrees with the Proposed Alternative's recommendations for Visual Resource Management. We feel the recommendations contained in the Resource Protection Alternative are necessary protections.

It is important that Class I, not simply Areas of Critical Environmental Concern, protections be established and enforced for Bull Gulch, Deep Creek and Thompson Creek. Thompson Creek needs to be included on this list because it is an important recreation area. It is close to population centers and is constantly used by locals and visitors alike in all seasons of the year. Its unique character and physiographic and scenic features are recognized by the BLM (p. 36, p. 81 of DEIS) and we would like to see it protected. ACEC designation is not enough protection for these areas. Class II designation provides for "retention of overall landscape character" (p. 254). This phrase is too open to interpretation and we support Class I Protections for these three areas.

We are opposed to the Proposed Alternative's proposal to change 45,332 (p. 178) acres from VRM Class II protections to Class III to allow for timber cutting. The need for expanded timber sales is not demonstrated (p. 30) and it is a known fact that timber sales in this region are a losing proposition. The visual resources of Colorado are an important economic asset and should not be compromised. This is especially the case along I-70 and Highway 131 where the BLM's proposed changes are inconsistent with the Eagle County Master Plan. The

BLM recognizes these areas as visually sensitive (p. 81-82). The Naval Oil Shale Reserve is even identified by the BLM as qualifying for ACEC designation (p. 81). We disagree with reclassifying this important winter range and watershed area to Class III. We recognize this possibly presents an additional obstacle to oil shale development but, until such development becomes more efficient, more environmentally compatible and more economically feasible, we support strong restrictions to protect the visual resources of the area. The BLM document admits Class III areas could be further degraded in the future. While it is true that much of the Naval Oil Shale Reserve is outside of "major" view areas, these other factors must be considered, too.

We are also opposed to changing the 1,365 Class III acres to Class IV designation because of development on private land. This would be seeking the lowest common denominator whereas the BLM should continue to preserve the natural landscape character that still exists in these areas. Existing developments on private lands should be encouraged to revegetate and future developments should be required to do so, through federal state or local permits. The BLM should set the example, not follow it.

The Aspen Wilderness Workshop recommends adoption of the Resource Protection Alternative recommendations concerning Visual Resource Management. Perhaps local volunteers such as the Sierra Club, scout troops, service clubs or the Audubon Society could be called upon to help with revegetation projects.



#### Ranching

The Aspen Wilderness Workshop is distressed to see that the BLM rates livestock over wildlife. Some of our members are ranchers and, as a group, we certainly recognize the importance of ranching to the region's economy. However, the Preferred Alternative would result in a net decrease of big game and other wildlife populations, thus resulting in decreased natural diversity and decreased revenue from hunting. We oppose the suggested extensive vegetative manipulations that would result in this decrease, especially since this would require perpetual care. We oppose disposal of big game migration routes and winter range lands, unless this is done in exchange for similar habitat. Here we refer specifically to the 6,000 or so acres in the Roaring Fork Capability Unit slated for disposal.

#### Timber

How has the BLM come up with its timber and fuelwood demand figures? Without this information, it is hard to know whether to accept these numbers. Things are especially confusing because the DEIS states that four different numbers will each "meet the demand for wood products for the next ten years" (p. 99, 122, 171, 147). Do these demand figures reflect the recent drop in housing, local population expectations and the economy as a whole? Are they based on traditional markets such as farmers and ranchers or on potential new markets? Are BLM demand figures coordinated with the Forest Service, which is also in the throes of planning to meet unknown future wood products needs? Unless this is done, the market, which is already weak, could be flooded with wood. Shouldn't the sights be set beyond ten years? How much timber will be available then? Where will it be?

We abhor the notion of timbering on slopes greater than 40%. Erosion greatly increases on these steeper slopes. Demonstrated demand for timber is not so great that this even needs to be considered. This objection also applies to mineral exploration.

On page 171 of the DEIS, it states: "By intensively managing forest lands, productivity and revenues would increase." We were not aware that it was the BLM's responsibility to increase productivity and revenues. Rather, Congress has charged the BLM with managing all the resources of an area. At the highest demand figures would only bring in \$81,000 in federal revenues (p. 174). Why sacrifice our precious wilderness heritage for such a small profit?

We would prefer to see timbering kept out of elk calving areas at all times, not just for six weeks in the spring. Elk are very sensitive to human intrusion, and do not take up that much of the land. This is especially true since summer range is becoming increasingly critical for local elk herds.

#### Recreation

Again, we question the basis of the BLM's demand figures, especially in light of the significant amount of acreage recommended for semi-primitive, motorized use. The BLM indicates high user preference for non-motorized recreation (p. 22, Technical Supp., p. 75, DEIS). We contest the statement that the effects of vegetative manipulations and timber harvesting

would be low on non-motorized recreation (p. 173, DEIS) because this would result in a loss of over half of the acreage now available for this RGS setting. Opening these lands to motorized recreation is asking for additional management problems such as litter, dust, off-road driving and stranded people and vehicles.

As stated earlier, we do not have the expertise to comment on as many of the issues raised as we would like to. So, just because we have not discussed a particular aspect of the document does not mean we necessarily agree with it.

These opinions are those of the Aspen Wilderness Workshop. They have been put together by members of our group. Any resemblance they may have to those made by other groups or individuals is purely coincidence and indicates the breadth of the support for these views.

It has been particularly frustrating while working on these comments to hear rumors of the impending split-up of the Glenwood Springs BLM Office. The RMP process is a good planning method. It will be an insult to the residents of this district and of the entire nation if it all becomes an expensive, time-consuming, useless exercise because the district is broken up to facilitate oil shale development and there are no funds left to manage and protect the other natural resources of this area as called for in the RMP.

We object to the way this draft document emphasizes commodity outputs. We hope that the final RMP will shift this perspective to protection of the natural resources of clean air and water, natural wildlife habitat and forage, and primitive recreation and wilderness.

Again, thank you for this opportunity to have our opinions made a part of the public record.



2 Feb 83  
Eagle, Colorado

Alfred Wright, Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
Glenwood Springs, Colorado

Dear Mr. Wright:

I submit the following comments and observations for your consideration in preparation of the FEIS of the Glenwood Springs Resource Management Plan. I am a resident of Eagle and own property on the Colorado River at the mouth of Sheep Gulch.

I support wilderness designation for all the lands within the WSA boundaries for Bull Gulch, Hack Lake, Castle Peak and Eagle Mountain. Inclusion of these lands in the wilderness Preservation System is a minimal commitment by this Resource Area.

Recreation use estimates for the Hack Lake WSA appear to be severely underestimated. Use of the Ute Trail through the WSA varies greatly during the year but appears heaviest during hunting season. Large numbers of hunters camp in the Big Springs region of the White River National Forest and many will day hunt far into the WSA. Others drop into the area from the "W" Mountain Trail. Early summer use is not nearly as heavy but I believe total numbers would be greater than those represented on page 22 of the Wilderness Study Analysis.

That section of the Ute Trail in the WSA is a cultural resource which can be afforded just protection only through designation as a Wilderness Area. Preservation offers an opportunity to

#### RESPONSE TO COMMENTER 30

Thank you for your comments.

##### Response 1

As stated in the technical supplement to the DEIS, no complete recreation use data for the original 3,360-acre WSA was available, and the numbers reflect the best estimates that could be made with the information available. No recreation use data is available for the 10 acres analyzed in this FEIS but visitor use is estimated to be negligible.

-2-

honor the precursors of today's wilderness travelers.

Those unrecorded generations of Utes left an area untrammelled and clearly dominated by the forces of nature. They came as seasonal visitors living in ecological harmony and leaving a trail of grace.

The existence of the Ute Trail in this WSA, if there were no other reasons, begs inclusion in the Wilderness Preservation System. The trail easily affords the ecological, scientific, educational and historic values demanded in the Wilderness Act of 1964. The harmony with which this trail and its heritage embrace the land is a clear call for protection.

Once designated wilderness the area should be attached to the Flat Tops wilderness and the two parcels administered as a single unit.

Designation of Bull Gulch and Castle Peak as wilderness could be beneficial in mitigating the population and visitor growth created by ski area expansions in Eagle County. The DEIS fails to assess future demands for wilderness use by either local or visitor populations. Certainly, neither the BLM, nor the U.S. Forest Service could pretend to assess visitor use or trends independent of each other.

With proper projections, the criteria used in "Wilderness Resource Economics: Recreation Use and Preservation Values" (Walsh, et al, 1981) could be applied to arrive at a cost/

##### Response 2

Demand projections were included in the supporting documentation for the DEIS. These projections estimate the carrying capacity of existing wildernesses in the state will be reached between the years 2000 and 2010. The U. S. Forest Service estimates the carrying capacity on seven wildernesses on the White River National Forest will be reached about the year 2000 (Final Environmental Impact Statement for the White River National Forest Land and Resource Management Plan). However, estimates indicate wilderness recreation use of the four WSAs, if all were designated, would be less than one percent of the total use in the local region. Thus, neither designation nor nondesignation would have a significant effect on future wilderness demand.

##### Response 3

Use of the Walsh study was considered, but it was determined the values may not be appropriate for analyzing the four WSAs in the resource area because the Walsh study was not site-specific and because of the abundance of wilderness near the resource area and the relatively small acreage of the WSAs (see Chapter 1).

Nondesignation cannot be considered to cause an across-the-board devaluation of an area, nor does the Walsh study attempt to make that claim. Depending on the preferences of individuals, either nondesignation or designation could cause enhancement or devaluation of an area.



## 3 | benefit analysis.

I find the timber economics in the DEIS highly suspect. National Forest lands in and near the Glenwood Springs Resource Area appear to be producing a surplus of saw timber. The loss of the sawmill at Eagle has created additional slack in the demand.

Further, I could not find a comprehensive cost/benefit analysis for development of the timber resource, specifically at Castle Peak and Bull Gulch. All management outlays including road construction, sale preparation, sale closing, clean-up and reforestation must be included in the cost figures.

4 | When total costs are compared with the revenue from any timber sale then a rational analysis can be made. Certainly current market conditions would not justify a sale at either location.

Even with a marked advance in the market <sup>(the)</sup> value of the timber on Castle Peak will probably remain marginal at best. A large part of the volume consists of beetle kill spruce for which there is no hard market. The Forest Service has been unable to clear its inventory of dead timber since the bug moved through the area some 40 years ago.

The problem is now compounded with a major infestation of pines in the surrounding forests. This new bug kill will add even more dead timber to the standing and unused inventory.

## Response 4

The FEIS does not directly analyze the economic costs or benefits of individual projects. Such an analysis would be included in activity plans, project plans, and the associated environmental assessments when they are prepared.

The local demand for dead, standing sawtimber is increasing. Local mills are favoring the dead timber resource over green wood due to its dryness and lighter hauling. The dead spruce sawtimber on Castle Peak would be a viable product under the present market situation. In addition, the depressed market that now exists is not a reason to forego forest management which could guarantee a forest products supply in the future.

Woodland products are presently in demand, particularly in the Eagle-Vail area where a commercial retail price of \$135 for a cord of pinyon is not uncommon.

Development of logging roads on Castle Peak will be a major expense, both in terms of dollars and environmental impact, with little foreseeable return. The Forest Service released Castle Peak to the BLM due, in part, to its remoteness. BLM appeared to close the Castle Peak development option when it failed to protest the closing of the Burns Road.

Several other economic analyses in the RMP appear weak or missing. It seems reasonable under NEPA to request a comprehensive economic analysis of any commodity sales by BLM. At a minimum this would include mineral sales (sand, gravel, fill, etc.), firewood sales and land sales. All may have a significant impact on local economies.

For example, if BLM reassessed its firewood sales policy, it might find that it has eliminated any Pinion-Juniper market in the private sector. If the private market could be developed then large scale vegetation manipulations would occur on private lands with an increased cash flow and animal carrying capacity resulting. The need for duplicate expenditures on public lands would then be greatly reduced or eliminated.

A similar scenario can be constructed for saleable minerals. With such analysis, under NEPA socio-economic impacts may be great enough to force mitigation.

Large scale land sales may also generate negative socio-economic effects. Additionally, it appears they will have a significant impact on wildlife populations within the Resource Area. Much of the land targeted for sale appears to lie in big game winter



range.

A brush which paints out all parcels of 100 acres or less covers too wide a stroke. A more subtle approach is needed. Although isolated plots of less than 100 acres may have little individual impact the total effect is substantial. It follows then that all small parcels should not be judged on a single criteria.

A 21% reduction in big game herds will have an immediate and significant impact on the local economy. More importantly wildlife must be considered a national resource with benefits accruing to the broadest base of citizens through existence and bequest values. Reassessment of this impact must entail reductions in the planned increases on grazing allotments.

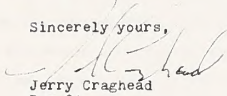
A 21% reduction of big game herds in this Resource Area is totally unacceptable.

I also oppose the sale of any resource lands along the Eagle River. Public access is a problem along much of the river and with increased development the problem will probably become worse in the future. Any acreage which allows continued public access to the river must be retained in public ownership. Although the problem along the Colorado River does not appear as critical, care must be taken to provide continued public access and boat landing sites.

I recommend approval of the entire Eagle Mountain WSA and agree it should be attached to the existing Wilderness for administration.

In closing I would express the hope that Dave Mensings's comments in the Glenwood Post during the week of Jan. 20 were not a coaching effort for a letter writing campaign to support the DEIS wilderness position. I am confident your approach is more objective than the notion reflected in the paper.

Sincerely yours,

  
Jerry Craghead  
Box 91  
Eagle, Colorado 81631  
303-328-7750



Eagle County Agricultural Landowners Association  
P.O. Box 867  
Eagle, Colorado 81631

February 2, 1983

Alfred W. Wright  
Area Manager  
Bureau of Land Management  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, CO 81602

Dear Mr. Wright:

On behalf of the Eagle County Agricultural Landowners Association, and its Directors, thank you for the opportunity to comment on the Draft Environmental Impact Statement on your Resource Management Plan. We support your decision to withdraw the Castle Peak area from consideration as a designated wilderness area, and agree with your conclusion that limiting off-road vehicle use to designated roads and trails would "maintain opportunities for primitive recreation and solitude." Your opinions on the Bull Gulch area are equally understandable. We do not believe that either of these areas should be prohibited from their existing and potential multiple uses, be it timber harvesting, mineral exploration, recreation or development, as long as the adverse impacts from such uses are properly mitigated.

In the case of the proposed transportation plan for the Castle Peak area, however, the draft EIS discloses that "resource degradation such as vandalism, littering and off-road vehicle damage caused by the increased use" will occur. Unless these impacts can be avoided, we would recommend that the Bureau of Land Management continue its present management plan, rather than increase the access. We recommend the Continuation of Current Management Alternative be imposed on this area.

Thank you for your time and effort.

Sincerely,

*John Benton*  
John Benton,  
President

*J.B.*

RESPONSE TO COMMENTER 31

Thank you for your comments.

## Natural Resources Defense Council, Inc.

Public Lands Institute  
1720 RACE STREET  
DENVER, COLORADO 80206  
303 377-9740

February 2, 1983

Alfred W. Wright, Project Leader  
David B. Mensing, Team Leader  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, Colorado 81602

Dear Messrs. Wright and Mensing:

Enclosed are the comments of the Public Lands Institute of the Natural Resources Defense Council and the National Wildlife Federation on the Draft Environmental Impact Statement on the Glenwood Springs Resource Management Plan. We offer these comments in a constructive attempt to help in implementing and improving the planning system.

We very much appreciate the courtesy of you and the team members in answering our questions and clarifying the issues. We would like to propose a meeting to discuss further the vegetation manipulation and socio-economic impacts and would like to work out a mutually convenient time and date. Would you be willing to consider that?

As agreed in my telephone conversation on January 28, 1983, with Mr. Mensing, we are mailing these comments on February 2.

Thank you for your consideration of these comments.

Sincerely yours,

*Carolyn R. Johnson*  
Carolyn R. Johnson  
Senior Public Lands Specialist

CRJ/km

Enclosure



Public Lands Institute  
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February 1, 1983

Mr. Alfred Wright, Area Manager  
Glenwood Springs Resource Area  
Bureau of Land Management  
P. O. Box 1009  
Glenwood Springs, Colorado 81602

RE: Draft Environmental Impact Statement on the Glenwood Springs  
Resource Management Plan

Dear Mr. Wright:

The following comments on the Draft Environmental Impact Statement on the Glenwood Springs Resource Management Plan are submitted on behalf of the Public Lands Institute of the Natural Resources Defense Council, Inc. (NRDC). NRDC is a national environmental law and policy organization with a long-standing interest in the wise use and sound management of our public land resources.

The National Wildlife Federation (NWF) also endorses these comments. NWF is the nation's largest conservation organization and is dedicated to the wise use of the country's resources. It has over 4 million members and affiliates in all fifty states.

Before discussing our comments, many of which are critical, we want to commend the team which assembled this document for its professional approach to the planning process. New inventories of public land resources were compiled and the plan contains readable, detailed maps and explanations. This approach contrasts sharply with the recent practices followed by BLM in compiling a Management Framework Plan -- which consisted of one copy, much of it handwritten, scattered in various offices. When found, no one could determine how the MFP

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Mr. Alfred Wright  
February 1, 1983  
Page two

applied to on-the-ground management decisions. Often the MFP's were not used or were unusable public documents.

As the first Resource Management Plan anywhere, this document marks an important milestone in BLM's implementation of its planning and management mandates. Unfortunately, the regulations are being changed once again and both BLM and the public will have to start over in obtaining a working familiarity with the regulations. Because this plan will not, therefore, become the model for subsequent plans, we are not presenting comments in the detail we would for such a first, "model" plan.

Although the plan is a decided advance over previous Bureau efforts, it fails to meet existing regulatory and statutory requirements in several significant ways. It contains no discussion or analysis of "critical threshold levels" for resource use that were established as constraints or cumulative impacts (43 CFR 1601.5-4(a)(9)).\* There is little evidence that BLM forecast resource demands as a basis for devising these plans, and no standards are offered for monitoring and evaluating the plan's implementation so that the plan can be changed as more information becomes available on its effects (43 CFR 1601.5-2(b)(5)(iv) and 1601.5-9). The document does not evaluate the extent or the reliability of the inventory data on which the plan is based. It includes no implementation plan for the measures that will be adopted. The regulations require that lands be assessed for unsuitability for coal mine development on the 28,520 acres of coal lands in the Resource Management plan (RMP) area (p.22). Most important, the heart of an RMP and the basis for the

\* All citations are to the planning regulations published at 44 FR 46386-46401, Aug. 7, 1979.



Mr. Alfred Wright  
February 1, 1983  
Page three

document is missing -- the specific planning criteria guiding the collection and use of inventory data and information, the analysis of the management situation, the design and formulation of alternatives, and the estimate of effects of alternatives required by the regulations (43 CFR 1601.5-2(a)). Of the two lists of criteria given, one (p. 11) merely repeats the basis for criteria found in the regulations (43 CFR 1601.5-2(b)) and the other (pp. 47-48) is a generalized list for selecting the preferred alternative and does not address most of the requirements of 1601.5-2(a).

We want to point out that wilderness policies of the Bureau have undergone substantial changes and reversals in the last few months since this DEIS was prepared with regard to management, leasing, and areas to be excluded. Thus, through no fault of the District this RMP is based not only on outdated wilderness policies but also on soon-to-be outdated planning regulations. These constant changes make the jobs of BLM employees extremely difficult and exasperating. It makes our job harder too; not only do we have to continually file legal actions but also we can't submit the depth of comments we would like to on the wilderness aspects of this plan. Therefore, we believe that the Final EIS must analyze the wilderness policy changes with regard to the area and the alternatives and allow a period for public comment. A comment period on the Final EIS is described on p. 4, figure 1-2.

#### Alternatives

Adequate, informed, and productive land management decisions -- and useful public comment on those decisions -- will only occur when the full range of alternatives are analyzed and presented. Indeed, BLM's own regulations require

#### RESPONSE TO COMMENTER 32

Thank you for your comments.

#### Response 1

The BLM's Wilderness Study Policy and Wilderness Management Policy have not changed. Changes that have occurred concerning the WSAs including the status of mineral leases and the amendment of wilderness inventory decisions are described in this FEIS. The analysis has also been changed accordingly. The "comment period on the Final FEIS" referred to in the comment was the 30-day protest period following publication of the FEIS on the RMP. No protests concerning wilderness management were received. There is no comment period on this wilderness FEIS but Council on Environmental Quality requires BLM to wait 30 days before signing the Record of Decision. In accordance with current policy regarding Wilderness EIS's, a Record of Decision will not be prepared until the EIS's addressing the entire state are completed and forwarded to the President by the Secretary of the Interior prior to October 21, 1991.

Mr. Alfred Wright  
February 1, 1983  
Page four

"several complete, reasonable resource management alternatives" and that "provide a range of choices from those favoring resource protection to those favoring resource production" (43 CFR 1601.5-5). The alternatives presented here do not present a range of choices and are confused as to name, intent, and result, as we describe below. While we do not advocate a magic number of alternatives, more are clearly necessary to achieve a range. By constricting the range and confusing the two choices presented, as this does, then devising an in-between preferred alternative, BLM has short-changed its own goals and failed to consider other reasonable alternatives. Three other possible and reasonable alternatives would be a true resource protection alternative, a low-cost alternative, and a minimum manipulation alternative.

#### The Alternatives -- General Comments

Each of the proposed alternatives (except No Action and Continuation of Current Management) attempts to solve land-use problems -- such as the conflict between wildlife and livestock for limited forage allocations, and the problem of water scarcity in the area -- by increasing the land's carrying capacity to support competing and often conflicting uses through varying degrees of "intense management."

Although the improved management practices and ecological manipulations described in the DEIS may be able to contribute to more efficient, productive use of public lands, the extremely heavy emphasis placed on resolving land-use problems by increasing the area's capacity is an extremely questionable approach to land management. The inherent capacity or potential of land to allow resource use without permanently impairing the resource involved depends, to quote BLM's own definition, "upon a fixed set of conditions which are relatively stable over time,



Mr. Alfred Wright  
February 1, 1983  
Page five

including...climate, slope, landform soils, and geology." 43 CFR 16D1.D-5(8)(n). Thus, although small increases in an area's capacity are likely to be attained without permanently impairing other land uses, the large scale of manipulations proposed by BLM will inevitably involve major trade-offs between competing land uses, such as livestock, water yield, timbering, and ORV use, on one hand; and wildlife, aesthetics, water quality, and the recreation they support, on the other. As a prime example of such trade-offs, each of the alternatives sacrifices aesthetics, recreation, and small and non-game species (which comprise the vast majority of the total wildlife population) by attempting to increase or maintain existing levels of livestock and big game.

Among the more objectionable aspects of the DEIS are:

1. Because the Economic Development Alternative (EDA), Preferred Alternative (PA), and even the Resource Protection Alternative (RPA) all attempt to increase the area's capacity through high levels of "intense management" or manipulation, each alternative would result in significant cumulative adverse impacts on the area's "sensitive" environment (p.82). The PA, for instance, would result in "somewhat intense development" which, combined with the anticipated regional growth, would result in "commensurately higher levels of air pollution" (p. 155); decreased aesthetics (and recreational opportunities) and increases in erosion from mechanical treatments, burning, and road construction and continual maintenance associated with vegetative manipulation and other types of resource management (p. 157, 173); adverse impacts on aquatic habitat (p. 163); a 21% decrease in existing big game populations and an

Mr. Alfred Wright  
February 1, 1983  
Page six

unspecified long-term decline in habitat conditions for small and non-game species (p. 167).

2. The proposed alternatives would result in many indirect effects which are not clearly added into the assessment of cumulative effects of such "intense management." Vegetative manipulation and timbering and mineral development, for instance, require increased access and fewer restrictions on motor vehicle use, which in turn "create some adverse impacts on the land itself due to resource degradation such as vandalism, littering, and ORV damage caused by increased use" (p. 178; also see water yield comments). Many of these indirect effects would also have social or economic impacts which are not considered (see socio-economic impacts comments).

Although it may be true that many of these effects are difficult to predict and measure, in economic or other terms, this does not mean they should be omitted from the EIS entirely. The sections on cumulative economic impacts, for instance, add only the economic effects of grazing increases, more timber harvest and smaller big game populations, and ignore the impact of scenic and environmental degradation on tourism and other forms of recreation (hiking, backpacking, rafting, photography, skiing) which form the basis of the area's economy.

3. Closely related to the problem of omission of obvious impacts in the DEIS is the problem of inadequate data to support many of the conclusions the DEIS does reach concerning the impacts of many management actions. For example, the DEIS states that water developments would increase local



wildlife populations (p. 164) but no supporting evidence is presented.

In addition to failing to meet the data and analysis requirements of 43 CFR 1601.5-2(b)(5), proposed management actions based on inadequate data such as increasing livestock allocations, vegetative manipulation and timbering violate the regulatory requirement that when inventory data on other information is insufficient, BLM's decisions "shall preserve future resource options and avoid irreversible commitments to the degree practicable" 43 CFR 1601.5-2(5)(iv).

4. Equally important, each of the alternatives assumes that all the improvements and manipulations proposed will be carried out, yet the DEIS fails to discuss the amount and source of funding necessary to implement each plan as required by 43 CFR 1601.5-4(4) or the relative cost-effectiveness of proposed actions. By relying heavily on "intense management" to increase the land's capacity to support various land uses, each plan would have to be successfully implemented in full to insure protection of overgrazing lands, wildlife populations and water quality. Benefits gained by vegetative manipulation, for instance, would begin in two years but would not be permanent unless regrowth was controlled. Thus, partial implementation of a plan could be disastrous on wildlife and could increase overgrazing. Therefore, the DEIS should contain detailed, long-term estimates of the cost and commitment of resources needed to be fully implemented in order to assure that all alternatives are realistic in terms of likely fiscal restraints. In addition, since each plan proposes significant expenditures of public funds to improve rangeland

and increase water yield, a cost-benefit analysis for each alternative would be appropriate. This would allow the cost of range improvements to be carefully weighed against government receipts from grazing fees, and would allow comparison of the relative cost-effectiveness of various alternatives.

#### Resource Protection Alternative

The Resource Protection Alternative (RPA) contains several major provisions which directly conflict with the high level of resource protection this alternative should offer. The proposed RPA would allow increased timber and fuelwood sales exceeding demand (p. 122); proposes large-scale vegetative manipulation to increase water yield by 6-9% and increase forage for livestock by 50% over existing use (p. 50, 54); and would dispose of 6,790 acres, or 3%, of big game crucial winter reserve (p. 52). These provisions all result in primarily short-term, economic benefits, and contribute little, if any, to the professed goal of this alternative -- the protection of fragile and scarce resources. As a result, the draft RPA fails to give an accurate picture of the optimal level of resource protection which could be easily attained in the GSRA. Disposal of winter reserve and increasing forage for livestock are particularly counterproductive to the goal of increasing wildlife populations. With rapid private development in the area, which is expected to reduce crucial winter reserve 8% over the next ten years, it is imperative that BLM give higher priority to wildlife forage if wildlife populations are to be maintained.

#### Economic Development Alternative

Similarly, neither is the proposed Economic Development Alternative (EOA) consistent with its professed goal of emphasizing intense management of resources



Mr. Alfred Wright  
February 1, 1983  
Page nine

contributing to the economic well-being of the area. The proposed EDA subordinates wildlife, which supports a major segment of the area's economy with wildlife based recreation, to livestock production, which represents a "small and declining part of the economy" (p. 76). In effect, the EDA inverts the appropriate priorities for these two competing uses of forage based on their relative contributions to the area's economy. As a result, the proposed EDA would actually result in a slight economic loss to the area, while the RPA would, ironically, yield the greatest positive economic impact (Table 3-28).

#### Preferred Alternative

Rather than emphasizing a balanced approach to land management, the Preferred Alternative (PA) clearly favors livestock grazing, water yield, timbering and motorized recreation over wildlife, wilderness and other non-motorized types of recreation where they compete. Despite their deficiencies, the RPA and EDA both demonstrate that optimizing wildlife, wilderness and other non-motorized recreation opportunities; and protecting crucial watersheds and water quality are all in the best interest of the GSRA, in terms of both economic development and resource protection. In several instances, however, the PA inexplicably makes a marked departure from major conclusions that can be drawn from the other alternatives.

For example, the PA proposes attempting to improve water quality in only two of the areas with known water problems, rather than managing all four known problem areas as proposed under the EDA and RPA (p. 50-51). Similarly, the EDA and RPA would both place restrictions on ORV use in order to improve erosion hazard areas, yet the PA proposes continuing ORV use that would prevent conditions in erosion hazard areas from improving (p. 50-51). Most significantly, the EDA and RPA

Mr. Alfred Wright  
February 1, 1983  
Page ten

propose that wilderness values be preserved on 10,755 acres and 30,630 acres, respectively, while only 340 acres would be preserved under the PA (pp. 56-57).

#### Water Yield

The OEIS describes three levels of actions and seven methods to eradicate trees and shrubs so that water runoff would increase (p. 17 and App. A). This eradication is coyly termed "manipulation". The levels range from 34,492 acres of aspen in the Preferred Alternative to 52,362 acres of aspen, conifer, and oakbrush in the Resource Protection Alternative to 104,396 acres of aspen, conifer, oakbrush and sagebrush in the Economic Development Alternative. The methods listed range from clear cutting to herbicide spraying. The process described for aspen is:

"Initially an experiment would be conducted to determine the actual expected increase in runoff and baseflow from aspen manipulations. Water yield management plans and environmental assessments would then be written for areas shown on Maps 3-4, 3-5, and 3-6" (p. 18).

The first question one logically asks about such proposals is who wants this water yield manipulation? When we posed this question to personnel of the Glenwood Springs BLM Area office, we were told that Union Oil and other oil shale developers requested it. Indeed, the maps (Maps 3-2, 3 and 4) show that one of the largest areas is on the East Fork of Parachute Creek, immediately upstream from the Union oil shale plant and proposed reservoir. Other large areas are located on Castle Peak, Hardscrabble Mountain, and east, southwest, and northwest of Glenwood Springs.

The increased water yields from the three levels are described in specific terms, such as 3-5 inches per year for patch-cutting of aspens (pp. 109, 134, and 159). This specificity does not appear to be supported by the state of the art. The OEIS cites Hibbert's 1977 publication as a basis. However, the preliminary



Mr. Alfred Wright  
February 1, 1983  
Page eleven

and sketchy field work performed on increasing water yield from aspen patch-cutting do not appear to support BLM's devising a plan granting authority to use the technique on such a large scale. Hibbert's report\* (p. 11) presents no independently obtained results, instead it cites to DeByle's 1976 publication.\*\* Similarly, DeByle cites Johnston's work. In checking Johnston's publications, we found that his 1969 publication describes (Robert S. Johnston, "Aspen Sprout Production and Water Use," USDA Research Note INT-89, 1969) a research project conducted for five years on one small fenced aspen grove in Utah. No grazing was allowed.

In contrast, BLM proposes to allow grazing in the "manipulation" areas (compare Maps 3-2, -3, and 4 with 3-14). Indeed BLM contends that in addition to increased water yields, the manipulation will improve grazing and carrying capacity of the range and grazing would be allowed on the land two years after "treatment" (p. 118). Nowhere does BLM describe the length of the initial experiment (p. 18), the conditions under which it would be performed, or the criteria by which it would be judged a failure or success. In addition, BLM does not analyze the management alternatives, objectives and techniques that be will considered if the experiment indicates the technique cannot be used on the scale now proposed in the DEIS. It is in these situations (the potential for experimental failure) that the planning regulations require BLM to make a worse case analysis and predict the probability of occurrence (43 CFR 1601.5-2(b)(5)(iv)).

\* Hibbert, Alden R., "Managing Vegetation to Increase Flow in the Colorado River Basin," General Technical Report RM-66, Rocky Mountain Forest and Range Experiment Station, U.S. Forest Service, 1976.

\*\* DeByle, Norbert V., "The Aspen Forest After Harvest," paper presented at Utilization and Marketing as took for Aspen Management in the Rocky Mountains, Ft. Collins, Colorado, September 8-9, 1976.

Mr. Alfred Wright  
February 1, 1983  
Page twelve

Of major concern are the inadequately analyzed and ignored impacts from the water yield proposals. For example, although herbicides are listed in Appendix A as one method for vegetative manipulation, we have been unable to find any discussion of what types of herbicides would be used; what the decay products would be; the application conditions and controls; the qualifications of the persons applying the herbicides; the impacts of the herbicides on water and air quality, genetic mutations, disease susceptibility and death rates of humans and aquatic and terrestrial wildlife. As recently as 1977, the Craig, Colorado, District BLM office has advocated and used the "Agent Orange" herbicide in water yield and range improvement programs on the public lands approved under the Management Framework Planning System.\*

Other impacts also inadequately analyzed or ignored are the costs of the initial eradication or "manipulation" and the costs and frequency of maintaining the conversion of trees and shrubs to grasses after the initial treatment. Aspens, for example, when patch-cut, sprout prolifically from the roots of nearby trees and the clearings soon return to aspen groves. Without maintenance, the presumed water yield increases will taper off, and the result is either a long-term maintenance program or a short-term water yield increase. The road or access construction necessary for access to the sites is largely overlooked in the analysis of impacts. The large increase in sediments after mechanical eradication is attributed to this disturbance.\*\*

\* Marvin Pearson, former Craig District Manager, numerous oral communications with Carolyn R. Johnson, 1976-1978.

\*\* U.S. Forest Service field inspection of the Fraser Experimental Forest for Conservationists, Aug. 2-3, 1982. File Report of Frances Green, National Wildlife Federation.



Additional concerns overlooked or casually dismissed are the instigation of a water conservation program instead of attempting to increase supplies. No analysis is performed of the effects of vegetation eradication and conversion for increasing water yield on habitat and population dynamics of non-game mammals and birds. The implicit assumption in the DEIS is that they will conveniently move to accommodate this program and no long-term impacts will result. This assumption relies on the false "vacuum in nature" theory; that is, that the carrying capacity has not been reached and there are vacancies, "for rent," spaces, in which these displaced animals can live. No analysis is presented to support the statement in the DEIS that "the small amount of aspen" removed "would reduce the significance of these impacts" (p. 165). In fact, the DEIS uses the identical two paragraphs to describe the impacts on terrestrial wildlife for all three action alternatives (pp. 115, 140, 165), yet the acreage affected ranges from 34,492 acres to 104,396 acres, and the DEIS admits that at least the aspen groves provide essential non-game habitat.

Appendix A (p. 188) describes BLM's proposal to increase water yield in mixed conifer forests by cutting openings in the trees so more snow will accumulate on the ground and melt slowly. This proposal appears to be based at least partially on work done at the U.S. Forest Service's Fraser Experimental Forest near Fraser, Colorado. The misconceptions inherent in and limited applicability of that work, particularly in mixed conifer forests under different climatic conditions, is described by a study performed by James R. Guadagno. We have attached a synopsis of that work to be incorporated in these comments.

#### Socio-Economic Impacts

In formulating an appropriate resource management plan for the Glenwood Springs Resource Area, BLM should bear in mind that the area will undergo rapid growth and change over the next couple of decades. Continued growth of the tourism/recreation industry, combined with potential large-scale oil shale development, will increase the population of the area by 40-80% in the next twenty years (p. 76). Increased population and development will have two easily predictable effects -- increased demand for the outstanding visual and recreational resources of the area, as well as a deterioration of these resources from increased development on private lands. The scenic backdrops, wide array of outdoor recreational opportunities, clean air, and lack of industrial development create an unusually high quality of life in the resource area, which is extremely important from the standpoint of the psychological health of residents and visitors, as well as an economic standpoint because of the area's heavy reliance on recreation/tourism. Consequently, the general effect of any plan for management of the large amount of public lands in the area should emphasize low development to balance rapid, less-controlled private development and should protect the extraordinary scenic and recreational resources upon which the area's high quality of life and economic livelihood are based.

The description of the present status and trends of the resource area in Chapter 4 indicates that the scenic resources and quality of life are extraordinarily sensitive to development impacts and that deterioration of many of the area's vital resources is already occurring. For example, the DEIS notes that, already "increased pressure is being placed on visual resources as a result of energy-related projects (and other developments) and the housing, utilities, and



Mr. Alfred Wright  
February 1, 1983  
Page fifteen

transportation needs associated with them", and that "public concern is also increasing about protecting visual quality for open space and scenic backgrounds for residential purposes and recreational uses" (p. 82). Particulate air quality is already poor in many parts of the area at times, according to the DEIS, due to natural conditions present combined with large influxes of people, automobiles, and fireplace usage during peak recreational seasons (p. 62). Wildlife habitat is continually shrinking from land and energy development, with crucial winter range expected to decrease 8 percent over the next ten years due to development on private lands, placing wildlife in increased competition with livestock on lands where significant overgrazing already occurs.

At the same time, demand for use of scenic and recreational uses of public lands is significantly increasing. BLM notes that public land users prefer primitive and semi-primitive non-motorized Recreational Opportunity Spectrum (RDS) classes (p. 85) and place unusually high emphasis on the visual resources of the GSRA (p. 81). As population increases from 40-80%, demand for these resources will undoubtedly increase at least proportionately. In fact, the scenic and recreational opportunities of the area create a unique quality of life which is the primary reason for many existing and future residents choosing to live in the area. In one case, as the Wilderness Suitability Analysis notes, "support for wilderness designation tends to come from younger residents, more recent arrivals to the area and residents in the resort areas" (p. 27). Thus, as the population swells with new arrivals drawn to the resource area because of its beauty and recreational resources, and its economy becomes even more dependent on recreation/tourism, the demand for and value placed on resource protection is likely to increase significantly.

Mr. Alfred Wright  
February 1, 1983  
Page sixteen

In view of these acknowledged trends -- increasing deterioration of the area's scenic and recreational resources from private development, and increasing demand on these same resources -- the management of public lands in the area should heavily emphasize protection of resources and the quality of life, which are vitally important to the social well-being and economic vitality of the area. Discussion of such socio-economic considerations is clearly mandated by BLM policy, which requires resource management plans to attempt "to achieve integrated consideration of physical, biological, economic, social and other sciences, and the environmental design arts"; and to consider "the relative significance of the public land...uses to local economies", "present and potential uses of public lands", "impact on uses of adjacent or nearby non-federal lands", and the "long-term benefits and detriments to the public," of proposed actions (43 CFR 1601.D-8(b), (d), (f), (g), (i)). However, all the alternatives in the DEIS contain little or no analysis of how impacts on the physical resources of the area will affect the "social well-being and quality of life". Discussion of socio-economic impacts is limited almost entirely to impacts on local ranching operations which constitute an extremely small portion of the population and economy, and the DEIS briefly concludes that "social well-being and quality of life are unlikely to be significantly effected" under the BDA and the PA (p. 175), while "social well-being and quality of life would most likely be affected (adversely or beneficially?) under the livestock grazing management proposals" in the RPA (p. 127). These brief conclusions are entirely unsupported in the DEIS and are directly contradicted by statements elsewhere in the document which indicate that all the proposed RMP's would have significant, usually negative, socio-economic impacts:



Mr. Alfred Wright  
February 1, 1983  
Page seventeen

1. The "somewhat intense" development proposed under the EDA and PA and "anticipated regional growth and energy minerals development would result in commensurately higher levels of air pollution" (p. 155).

In addition to the considerable socio-economic value to the area of high air quality, BLM must consider the impact of decreased air quality on three adjacent Class I air quality areas -- Flattops, Eagles Nest, and Maroon Bells/Snowmass Wilderness Areas -- as required by 43 CFR 1601.0-8(j) and 1601.4-3(a). Strict limitations exist on additional amounts of pollution allowable in these areas. Although the DEIS acknowledges that "BLM must consider these limitations when air quality impacts are anticipated from proposed actions" (p. 63), the document contains no data or analysis of this limitation on allowable air quality impacts.

2. The highly-valued visual resources of the area would also decrease commensurately under the EDA and PA as a result of moderate to high levels of development on public lands combined with a high level of private development. The DEIS notes that "cultural modifications" associated with development -- such as power lines, gravel pits, mines, communications sites, ORV use areas and dump sites -- have already depreciated scenic quality. However, the DEIS fails to include the additional impact of increased "cultural modifications" in any section under the PA and EDA.

Additionally, under the PA, 45,332 acres of tentative VRM Class II would be changed to Class III and managed under less restrictive objectives. The impact of these changes would be particularly adverse on a large number of people because the downgraded area is precisely adjacent to where the greater part of any additional growth will occur near the towns of Eagle and Parachute or Rifle (p. 76 and Map 3-31).

Mr. Alfred Wright  
February 1, 1983  
Page eighteen

The visual deterioration in the Parachute Creek and Rifle regions would also be compounded by serious air quality impacts due to oil shale development (p. 63). In addition to deterioration from timber harvesting and vegetative manipulation, visual quality of these areas could be further degraded to an unknown degree, since any future proposals would be subject to less restrictive objectives (p. 178).

3. The transportation management plan proposed in the EDA and PA would also create impacts which would significantly affect the social well-being and quality of life. The greater access and 43 to 83 miles of additional roads proposed under the EDA and PA, would "create some adverse impacts on the land itself due to resource degradation such as vandalism, littering, and ORV damage caused by increased use" (p. 178), according to the section on transportation impacts. However, like many other impacts that would clearly affect the social well-being, quality of life, and possibly even the economic well-being of the area, the adverse impacts from the transportation plan in the EDA and PA are not considered in the brief section on social and economic impacts.

#### Grazing

The emphasis on maintaining or increasing existing levels of livestock grazing in the DEIS is particularly objectionable in view of the wealth of information presented indicating that livestock production can be increased only at the expense of the more important economic and ecological considerations.

It is obvious, first of all, that the existing level of grazing is causing or contributing to environmental degradation. About half, or 128, of 253 allotments are being overgrazed (p. 57); overgrazing is a primary cause of erosion in the area (p. 63); "substantial portions" of the resource area are in static and downward ecological trends (p. 72); riparian vegetation and aquatic habitat, primarily on



Mr. Alfred Wright  
February 1, 1983  
Page nineteen

the Naval Oil Shale Reserve is "declining significantly," and would improve "significantly" if grazing were decreased (p. 53); and shortening livestock grazing on summer, high winter, and crucial winter range would reduce competition between livestock and big game for browse, resulting in less winter mortality and better fawn and calf survival (p. 165).

Secondly, livestock represents a "small and declining part of the economy," which BLM virtually concedes it cannot substantially revitalize (p. 76). The only justification given concerning the proposed increase in livestock under the PA is "because ranchers feel existing use is too low and BLM feels total preference would be too high, active preference was selected as the objective" (p. 46).

Although ranching admittedly retains an important role in the area -- supporting long-time residents, giving the area the rural western character that attracts tourists, and providing a buffer between resort areas and energy development -- the 167 ranch operators using BLM lands rely on this range for an average of only 7% of their total forage needs (p. 76). Moreover, the adverse impacts of grazing reductions or adjustments would be mitigated by several factors. First, the 17% reductions proposed under the RPA would represent only 1.19% of total forage needs (7% of 17%). Secondly, no reductions would occur until monitoring has taken place, according to the DEIS, providing a transition period during which alternative forage could be arranged (p. 125).

In addition, although grazing reductions could significantly affect a number of ranches, which are smaller and more dependent on forage from public lands, we would like to point out that overgrazing is clearly not in the long-term interest of any ranching operation because sustained livestock production is ultimately dependent on the ecological health of rangeland. Most of the measures taken to

Mr. Alfred Wright  
February 1, 1983  
Page twenty

increase forage for livestock will be made directly or indirectly at the expense of wildlife (including species other than big game), aesthetics, soil and water quality, which are ecologically and economically important to agriculture as well as recreation/tourism. As noted in the comments on water yield, vegetative manipulation is likely to involve many more adverse environmental impacts than are noted in the DEIS: significant soil erosion and water quality degradation may occur, one ecosystem supporting many kinds of wildlife is replaced by another designed to support primarily livestock, and continual maintenance (and degradation) is necessary to control regrowth.

Just as importantly, the proposals to increase livestock forage, like proposed water yield projects, also lack adequate supporting data or analysis to indicate that they are feasible and would not result in additional adverse impacts (43 CFR 1601.5-6 and 40 CFR 1502.16). First, the document does not contain enough site specific information on such factors as the grazing capacity under current conditions, the suitability of allotments for grazing, nor is there even an explanation of why this information is missing (43 CFR 1601.5-2(b)(5)(i), (ii), (iii)). The DEIS is not specific about what BLM is proposing to do about the existing situation except for vegetative manipulation and classification. The DEIS specifies limited changes in livestock grazing during big game crucial use periods (p. 24) but is unclear about other changes in the grazing system (p. 167). Although estimates are given of the total acres upon which vegetative manipulation would occur under each alternative, there is no mention of the specific type and degree of the management practices (outlined in Appendix A) which are assumed to contribute to increased grazing capacity.

Despite the uncertainty this lack of information creates concerning the



Mr. Alfred Wright  
February 1, 1983  
Page twenty-one

reliability of predicted forage increases for both wildlife and livestock, no "critical threshold levels" for wildlife forage or population are set to protect wildlife from shortages of forage (43 CFR 1601.5-4(a)(9)).

Furthermore, although the RPA, EDA and PA all predicate increase forage on large increases in management actions, the DEIS contains no cost estimates or cost-benefit analysis by which to evaluate the fiscal feasibility and relative cost-effectiveness of each alternative (43 CFR 1601.5-4(a)(4)).

The fact that even the RPA calls for only a short-term 17% decrease in livestock grazing (when 128 of 253 allotments are admittedly overgrazed already) followed by a 50% increase in livestock allotments suggests it is BLM's intention to increase or at least maintain livestock grazing regardless of the environmental impacts or economic trade-offs.

In sum, we would like to express our deep concern over the extremely high priority livestock is given in the DEIS without analyzing the serious ecological complications and trade-offs involved.

In conclusion, we commend the team for a fine first-cut approach to resource management planning. In these comments we have identified several methods and issues on which we recommend substantial revision and further analysis. We look forward to working with BLM in this process.

Sincerely yours,

*Carolyn R. Johnson*  
Carolyn R. Johnson  
Senior Public Lands Specialist

*Eric Hildebrandt*  
Eric Hildebrandt  
Intern, Policy Analyses

## Colorado Wilderness Network

2939 East Colfax • Denver, Colorado 80206 • 573-7870

February 1, 1983

Mr. Alfred Wright, Area Manager  
Glenwood Springs Resource Area  
Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, Colorado 81602

Dear Mr. Wright:

We appreciate this opportunity to comment on the RMP/DEIS and on the Technical Supplement on wilderness for the Glenwood Springs Resource Area. You will find our comments enclosed with this letter.

In reviewing the RMP/DEIS, we are concerned by the Preferred Alternative's unexplained emphasis on commodity development and motorized recreation, to the detriment of environmental and economic values of greater importance to the community. This over-emphasis on development is unsupported by the analyses in either the Resource Protection Alternative or the Economic Development Alternative, and is, in our view, inappropriate and unwarranted.

The long-term well being of the Glenwood Springs region will come from the wise management of its air, water, wildlife, and wilderness resources, and from a balanced, recreation-based economy. None of these goals is reflected in the Preferred Alternative. In promoting motorized recreation, timber and minerals development, and water yield, the BLM is actually undercutting the resource values on which the community is most dependent: its lucrative wildlife resource, its dwindling non-motorized recreation opportunities, and the long-term viability of its ecosystem.

We wish to express wholehearted support for the Resource Protection Alternative, which we feel recognizes the economic as well as ecological importance of conserving the region's natural heritage. We strongly endorse wilderness recommendations for all four WSA's, which represent the only 4% of BLM's holdings in the area which remain pristine and available for wilderness recreation.

Aiken Audubon Society • Arkansas Valley Audubon Society • Aspen Wilderness Workshop • Colorado Association For River Preservation • Colorado Mountain Club • Colorado Open Space Council • Colorado Trout Unlimited • CU Wilderness Study Group • Denver Alpine Club • Denver Audubon Society • Environmental Research Group • Friends of the Dolores River • Friends of the Earth • Gunnison Wilderness Society • High Country Citizens' Alliance • Public Lands Institute • San Juan Ecological Society • San Luis Valley Wilderness Coalition • Sierra Club • Southeast Colorado Wilderness Coalition • The Wilderness Society • Two Rivers Citizens Association • UNC Colorado Public Interest Research Group • Uncompahgre Audubon Society • Upper Arkansas Wilderness Coalition • Western Colorado Resource Council • Wilderness Workshop

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Mr. Alfred Wright, Area Manager  
Page Two  
February 1, 1983

In not recommending any but a token amount of acreage for wilderness, the BLM has failed to acknowledge that, without the permanent protection of wilderness status, there could soon be no wild lands left in the Resource Area.

We strongly urge the BLM to reconsider its decision, and to choose the Resource Protection Alternative.

Sincerely yours,

*Rosalind McClellan*  
Rosalind McClellan  
Colorado Wilderness Network

*Michael D. Scott*  
Michael D. Scott  
The Wilderness Society

*Denise Dralle*  
Denise Dralle  
University of Colorado  
Wilderness Study Group

*Mark Pearson*  
Mark Pearson  
Colorado Open Space Council

*Kirk Cunningham*  
Kirk Cunningham  
Rocky Mountain Chapter,  
Sierra Club

ces

enclosure

cc: The Honorable Ray Kogovsek  
Mr. George Francia, State Director, BLM

COLORADO WILDERNESS NETWORK  
COMMENTS ON THE RESOURCE MANAGEMENT PLAN AND  
WILDERNESS DRAFT ENVIRONMENTAL IMPACT STATEMENT  
FOR GLENWOOD SPRINGS RESOURCE AREA

The Glenwood Springs Resource Management Plan (RMP) is among the first five to be released in the nation. In the thoroughness of its analysis, the wealth of its data base, and detailed format, it sets high standards for future RMP's in Colorado.

Exceptions to this are the economic sections of the DEIS, which fail to give the reviewer accessible, in-depth data from which to assess the economic consequences of the various alternatives. Rather than being relegated to rudimentary tables scattered among the back pages, cost/benefit figures for each resource need to be included in both the initial Summary and in the Comparative Analysis (pp. 48-59.) More important, the final RMP and Wilderness EIS need to include a full scale cost/benefit table, showing the economic trade-offs for each resource under each alternative.

In general, however, the Glenwood Springs Planning Team is to be commended for examining all possible uses for each portion of its Resource Area before settling on any one management option, and for the array of administrative protections assigned to sensitive areas -- such as off-road vehicle closures, no surface occupancy stipulations, visual resource management, semi-primitive, non-motorized recreation classifications, ACEC designations, and unsuitable for utilities zoning. Also appreciated are the attention given to cultural resources, the separate document on wilderness, and the maps and charts which help clarify this complex material. Such detailed analysis we may not expect to see in future RMP's if budget cuts and regulatory "streamlining" continue.

Among the best aspects of the Resource Management Plan (RMP) is the use of two alternatives, one emphasizing resource protection and one emphasizing economic development as tools to help both the public and the agency arrive at balanced management decisions. These carefully thought-out alternatives were presented to the public for review at open houses six months prior to the release of the DEIS, with the understanding that they represented two ends of a spectrum and that wise management would fall somewhere between the two.

It was, therefore, disconcerting to discover that not only does the Preferred Alternative (PA) fail in many respects to strike this balance, but in some areas it goes even further than the Economic Development Alternative (EDA) in its development emphasis. Most notable are its substantial reductions in wilderness, wildlife levels, and lands closed to mineral development. For example,

RESPONSE TO COMMENTER 33

Thank you for your comments.

Response 1

The FEIS does not directly analyze the economic costs or benefits of individual projects. Such an analysis would be included in activity plans, project plans, and the associated environmental assessments when they are prepared.

The local demand for dead, standing sawtimber is increasing. Local mills are favoring the dead timber resource over green wood due to its dryness and lighter hauling. The dead spruce sawtimber on Castle Peak would be a viable product under the present market situation. In addition, the depressed market than now exists is not a reason to forego forest management which could guarantee a forest products supply in the future.

Woodland products are presently in demand, particularly in the Eagle-Vail area where a commercial retail price of \$135 for a cord of pinyon is not uncommon.



Page Two

whereas the EDA proposes that 13,225 acres be closed to mining location, and 19,083 acres be closed to oil and gas leasing, the PA recommends that only 2,810 acres each be closed to these two activities. What were apparently considered adequate amounts of land for minerals development in the EDA are substantially increased in the PA.

Wilderness acreage, which was already cut from 30,630 acres in the Resource Protection Alternative (RPA) to 10,755 acres in the EDA, has been reduced to only a token 340 acres in the PA. Even that was recently dropped by Secretary of Interior Watt's action to eliminate areas of less than 5,000 acres, leaving the Glenwood Springs Resource Area (GSRA) with no wilderness recommendations at all.

Most perplexing of all, the PA proposes a decline in big game populations, which will reduce by one million dollars revenues to the local community derived from hunting (p. 57).

Some resource management levels have been adjusted for the better in the PA; fewer lands have been identified for disposal. Proposed ORV closures are larger, roading mileage smaller (pp. 58-59), and livestock grazing levels slightly less ambitious in the EDA, possibly in response to projected cutbacks in funding for these types of resource management activities.

However, the PA's unexplained shifts in the areas of minerals, wilderness, and wildlife seem unrelated to the previous alternatives. NEPA regulations state that a DEIS is a decision-making document (40 CFR 1502.1), and that "alternatives should provide a clear basis for choice" (40 CFR 1502.14).

The PA departs so dramatically in some areas from the alternatives formulated through years of BLM planning and public involvement, that we question whether the RPA and the EDA did, in fact, provide a basis for choice. Does a preferred alternative so at variance with the preliminary alternatives still fulfill the NEPA requirements? The result is a preferred alternative more in line with a commodity emphasis, but which ignores the needs of the local economy and ecology.

In its emphasis on timber and mineral development, the PA flies in the face of regional economic trends favoring recreation and tourism. The Glenwood Springs BLM would better serve the community by choosing management options designed to promote the educational, scientific, and recreational uses of its resources rather than focusing so heavily on development activities. The BLM has put itself in the position of promoting economically insignificant resources at the expense of economically important resources.

Page Three

Critical to the viability of the regional economy is the income derived from hunting and other non-motorized recreation. Yet both the EDA and the PA propose levels of timber harvest, minerals extraction, water yield, ORV use, and grazing which will directly undercut this economic base. Page 76 states that, of the 47 largest employers in the region, 34 are tourist/recreation related and only four are related to manufacturing and commodity production. Page 77 shows that 56.6% of the regional employment comes from activities directly related to tourism.

Nevertheless, the PA proposes development which will cause a loss of \$1,228,000 in personal income (p. 175), as compared to the RPA, whose emphasis on wildlife and wilderness management will result in an increase in personal income of over one million dollars.

In light of these decisions, it is not surprising that local residents, testifying in December 1982 public hearings, questioned the wisdom of allowing so large a decline in big game populations, which provide income during the critical off-season.

#### SPECIFIC COMMENTS ON THE RESOURCE MANAGEMENT PLAN DEIS

##### Visual Resource Management (VRM)

1. Deep Creek, Thompson Creek, and Bull Gulch are proposed for VRM Class I in both the RPA and the EDA. No areas are proposed for Class I VRM management in the PA, despite the importance of the community's scenic qualities to its economic base and quality of life. This would seem to be an unjustified concession to the timber and minerals interests, which is not conducive to the best interests of the community.
2. The highly visible Rifle Gap Reservoir is currently reserved to coal development, but should be declared unsuitable for surface occupancy to preserve its visual qualities.
- 2 | 3. No provisions are made in the PA to protect Castle Peak WSA's Class A scenery in the event of no wilderness designation.

##### Water Quality and Yield

1. The PA proposes water quality improvements for only two problem areas, leaving out two more which are proposed for improvement in both of the other two alternatives.
2. The PA's ORV restriction on 166,000 acres is higher than that of the other two alternatives, and would have favorable impacts on water quality.

##### Response 2

Existing VRM classes within the WSA would not change if the WSA is not designated as wilderness. Approximately 10,513 acres would be managed to allow changes as long as the changes are not evident in characteristic landscape. All management activities or development proposals would be evaluated to determine if changes would be within these constraints.



3. The PA downplays the cumulative impacts on water quality of its combined timber, minerals, roading, ORV, water yield and livestock management plans.
4. Critical watersheds and erosion hazard areas are not adequately protected from development. For example, the Debris Flow Hazard Zone northwest of Glenwood Springs and the Elk Creek Municipal watersheds shown in Map 3-5 are not exempt from oil and gas subsurface leasing, roading, ORV's (map 3-37), utilities and communications facilities (3-44), and grazing projects.
5. Increased soil loss and sedimentation which will result from the PA's proposal to increase water yield, will interfere with its goal of improved water quality. The PA's proposed water yield levels constitute only a fraction of normal water level variations in the region. This marginal advantage fails to outweigh the adverse impacts of water yield projects on soils, wildlife habitat, and water quality.
6. More sensible are the water yield increases of from 6,900 to 9,100 acre-feet per year (p. 50) described in the RPA.

## WILDLIFE

1. The PA specifies three fewer sites for the re-introduction of peregrine falcon than even the EDA recommended.
2. The PA drops the RPA's plan to introduce big horn sheep into the Government Creek area. The RPA's big horn sheep introduction plan should be adopted in the final RMP, and with it, a clarification as to how it would be accomplished in an area which is identified on Map 3-9 for coal management. In dropping the introduction site indicated in the RPA (Map 3-11), the BLM is denying the Colorado Division of Wildlife's request for this site as a transplant area. This site has been CDOW's #1 priority for such a program in its northwest region since 1979, and we are disappointed that, after stalling on CDOW's repeated requests, the BLM has apparently made its refusal final. Big horn sheep range has suffered severe restrictions in the last 70 years of fire control practices, and new range is badly needed. No other potential range has been identified in the Glenwood Springs area. The loss of this site will be a loss to the immediate community, as well as to the State as a whole.
3. According to the PA, only a few streams will be managed to improve wildlife conditions, as opposed to both the RPA and the EDA, which recommend improvements for "most below-average lakes and public lands in the resource area" (pp. x-xii).
4. The RDA-recommended big game population increases come closer to meeting the CDOW goals than those of the PA.
5. The PA proposes a 7% decline in big game populations (p. 53), and a resulting loss of \$1 million in personal income. The RPA recommends a 20% increase in those populations, with a corresponding increase of \$1 million in personal income.

## LIVESTOCK

1. The Colorado Wilderness Network recognizes the importance of the ranching sector of the Glenwood Springs regional economy which, despite its decline relative to other sectors, is important as an agent of historic continuity and in maintaining the region's quality of life. Although only 7% of the area's livestock forage is actually located on BLM lands, efforts should be made to keep livestock grazing at existing levels.

Achieving this goal could be done without resorting to the range management programs on the scale outlined in all three alternatives. Much of the existing range has been overgrazed by both livestock and wildlife: 30% is in poor condition and only 9% is in good condition (p. 72). This fact, and the high cost of range improvements compared with grazing fee revenues, suggest a negative cost/benefit ratio for any kind of range improvement program.

For these reasons, and because of the dubious advantage (to soils, wildlife diversity, etc.) of large scale vegetative manipulation, the Colorado Wilderness Network recommends a range improvement program considerably more modest than those of any of the alternatives. No more than slight increases in livestock and wildlife are needed for economic stability, while reduced forage production goals would, in our opinion, represent a more plausible "Resource Protection Alternative."

Of the three alternatives, the RPA is preferable because it is ecologically more sound, and because it will result in the greatest long-term benefits to both livestock and wildlife. According to the RPA, AUM's will be reduced, initially, by 17%, presumably in order to reduce overgrazing and better ensure the success of the range improvement program.

Although this could increase economic hardship to ranchers in the short-term, only 7% of the Resource Area's grazing lands will be affected, and it is probably the only way to ensure long-term viability of BLM grazing lands. In addition, the long-term result will be a 50% increase in forage production, which will benefit the region's lucrative wildlife resource as well as its livestock.

The PA's recommended 3% initial increase in AUM's will exacerbate existing deterioration in range conditions and will produce increases in forage of only 37%.

Adverse impacts on grazing could also be reduced by adopting the RPA's land disposal projections. According to the RPA's land disposal program, only 1,026 AUM's will be lost, rather than 2,268 AUM's if the PA's land disposal plans are instituted.



## FOREST MANAGEMENT

The PA's decision to harvest timber only on slopes of less than 40% is a wise one. We suggest that it should become an established policy for ecologic reasons (soil erosion, etc.), and not just because high-cost logging techniques are not available in the region (p. 28) or because poor market conditions temporarily make timber on these slopes uneconomical to harvest (p. 73).

The economic benefits to be derived from the higher timber harvest level recommended in the PA are only marginal and easily offset by the ecologic and economic benefits of the lower timber harvest level proposed by the RPA.

Tables on pp. 127 and 175 displaying increases in personal income levels due to different forest management options show a projected increase of from \$174,000 to \$398,000 in the RPA, and an increase of \$337,000 in the PA. These figures do not show a significant difference, and both are dwarfed by the loss of \$1.6 million in personal income which will result from the PA's projected decline in wildlife (Table, p. 175). Also, the DEIS points out that much of the increase in personal income and employment would take place outside the Resource Area (p. 126).

Also marginal is the difference in the contribution of each alternative's timber harvest level to regional capacity and demand. The White River National Forest's sawtimber capacity is 100 MMBF, at a minimum<sup>1</sup>, to which the RPA's timber harvest levels of .7 MMBF and the PA's timber projection of 1.8 MMBF would contribute only .07% and 1.8%, respectively. Similarly, the contributions of the two alternatives to regional saw timber demand are only 5% and 10%, respectively. The White River National Forest's capacity so far exceeds demand that all of the GSRA's timber could remain unharvested and never be missed, let alone the small amount of timber recommended in the PA.

Compare these marginal differences in the economic consequences of the two proposed timber harvest levels with their on-the-ground impacts. The PA recommended intensive timber management for 17,905 acres rather than the 7,175 acres recommended in the RPA. Under the PA, more than twice as much acreage will suffer the effects of timbering on soils, water quality, wildlife species diversity and habitat, visual resources, critical elk calving grounds, and non-motorized recreational values.

<sup>1</sup>According to John McCarthy, Forester, WRNF.

Since the timber harvest levels of the RPA provide almost the same economic benefits as the PA, while at the same time preserving more of the Resource Area's ecological and economic base, the larger timber harvest goals in the PA are not justified.

The amount of fuelwood harvest proposed in the PA may also be too high, considering that a growing woodsmoke pollution problem in the region may eventually cause a tapering off of demand for fuelwood. Also, the soil impacts from harvesting fuelwood are worse than those from harvesting sawtimber, according to the DEIS.

To aid the public in assessing proposed timber goals, the final RMP should include a detailed cost-benefit analysis, which includes not only anticipated revenues to the community and to the Federal Treasury, but estimated management costs of the various harvest goals. Considering the high cost of building roads, and possible future Forest Service budget cutbacks, it may be more economical to restrict logging to already-roaded areas, until and unless future demand justifies the roading of new areas.

Also, the final RMP should clarify why 1.8 MMBF is deemed adequate to meet local timber demand on p. 171, while only .7 MMBF is apparently considered adequate for the same demand on p. 73.

## LAND TENURE PROGRAM

The Glenwood Springs BLM's Land Tensure Program, as described in the PA, would dispose of 23,254 acres of BLM land, about half by sales which would represent a net loss to BLM's resource base. Only one quarter of this (4,320 acres) is in the urban or semi-urban categories and can therefore be justified on the basis of benefitting the local communities.

Much of the rest of these lands are not small, isolated urban parcels whose sale might be justified for manageability reasons, but rather moderate-sized parcels containing range, timber, and wildlife resources of considerable importance to the community.

Section 203 of FLPMA states that public lands can be sold in order

to serve important public objectives, including . . . expansion of communities and economic development . . . which outweigh other public objectives [such as] recreation and scenic values which would be served by maintaining such tracts in public ownership. [Emphasis added.]



Nothing in this section justifies land sales for the purpose of balancing the federal budget. Only overriding public interest can justify either the exchange or sale of public lands. Is the sale of up to 23,000 acres of public land in the Glenwood Springs Resource Area, in order to bolster the Federal Treasury by an infinitesimal fraction of one percent, to be considered in the public interest? The public objectives to be served by land sales and exchanges, as defined by FLPMA, have to do not with balancing the federal budget, but with economic, recreational, and scenic advantages primarily to local communities. These are the very assets which the BLM's land disposal program most jeopardizes.

Land prices will go down. Federal payments to the county will be lowered. The increased private land base will increase administrative costs to local jurisdictions. Worst of all, 14,730 acres (or 6%) of the RA's crucial big game winter range will be lost. Along with loss of habitat due to private land development, this will cause a 21% decline in big game, and a corresponding decrease in hunting revenues critical to the local economy.

Manageability is a commendable goal of the land disposal program, but it is better accomplished by exchanges than by land sales, so that the BLM can maintain its overall resource base. Wildlife habitat and other natural resources are better managed by the BLM than by the private sector, a fact apparently agreed to, even by some local governments (p. 39). The public interest, both local and national, is ill-served by this blatant give-away of a natural heritage belonging to all Americans.

The land disposal program would be better framed as the Land Acquisition Program. Its focus should be the identification not of lands for disposal, but of lands whose acquisition (by exchange) would improve the consolidation and manageability of resource-rich BLM lands. Local residents and land owners should look twice at a program which will lower land values and threaten an important economic resource in order to draw more dollars into the insatiable Federal deficit.

Regarding exchanges, we recommend that lands with significant resource values be identified specifically for exchange, rather than for sale. Also, we would like to have more information on the larger, more valuable parcels up for disposal in order to comment on their disposition. More information should be made available for public review on detailed aspects of the program, such as fair market value, who gets the first chance to buy tracts, and whether state or local approval will be required for sale.

The Land Tenure Program may qualify as a major federal action under the National Environmental Protection Act (NEPA), and as such may require a full-scale Environmental Assessment.

#### CONCLUSION

In conclusion, the Colorado Wilderness Network feels that the best interest of the Glenwood Springs region, and Colorado as a whole, would be better served by the Resource Development Alternative than by the Preferred Alternative. The development emphasis of the PA is too extreme in certain areas, and unsupported by anything in the text. We find it perplexing that the BLM has recommended an alternative whose adverse impacts to the region's soils, water, scenery, wildlife, wilderness, and the local economy, will be worse even than those of the Economic Development Alternative.

The RPA, while erring still on the side of development, represents, on balance, a wise plan for the sound management of the region's natural resources over the long term, and is the best way to promote local economic stability.



## WILDERNESS RECOMMENDATIONS

The Glenwood Springs BLM's failure to recommend virtually any wilderness is not only disappointing, but appears arbitrary and capricious given public and agency support for Bull Gulch, which was evident at the May 1982 open houses.

All four of the Resource Area's WSA's, taken together, constitute 30,360 acres, only 4% of the overall RA land area (p. 61, DEIS). This 4% is the only land left in the 1.2 million acre Resource Area which remains roadless, essentially natural, and which can still provide opportunities for solitude and primitive recreation. A region where the population has more than doubled in the last 20 years and urbanization is rapidly encroaching on open space cannot afford to lose its remaining 4% of wilderness.

The value of a resource can be measured by its scarcity relative to demand. By this definition, wilderness is perhaps the most valuable resource currently under consideration by the BLM. Not only is wilderness scarce, but, as the Technical Supplement pointed out, visitor preference for the wilderness setting is high. Increasingly heavy use in the nearby Flattops and Eagle's Nest Wildernesses point to a demand for additional wilderness in the area.

The PA's emphasis on motorized recreation seems inappropriate considering that 30 times more land in the RA is devoted to motorized recreation than to non-motorized (p. 31). With four ski areas existing or planned for the region, and 80% of the RA open to ORV use (Table 3-16, p. 31), it is difficult to understand the need to put roads into the few roadless areas which still remain.

3 The failure to recommend any but a token amount of wilderness runs counter to the best interests, both actual and perceived, of the local community. In economic terms, a non-wilderness recommendation for Castle Peak, Bull Gulch, and Hack Lake will lead to a decline in the wildlife, visual, and other wilderness values of these areas. This, in turn, will adversely affect a major portion of the local economy, hunting, and non-motorized recreation.

4 Despite the Supplement's repeated assertion that "an apparent majority [of local residents] is opposed to wilderness designation," public opinion expressed in public comments and at the May 1982 open houses was clearly on the side of wilderness. Pitkin County has expressed strong support for wilderness recommendations for all three areas. At BLM hearings in Glenwood Springs, Grand Junction, and Denver, wilderness supporters outnumbered those opposed by ratios of roughly 19:1, 17:1, and 16:1, respectively.

BLM's unsupported statement that a majority of residents oppose wilderness should be either documented in or removed from the final EIS.

## Response 3

Nonwilderness recommendations were not considered to have significant adverse effects on wildlife, visual values, or hunting in these WSAs as analyzed in Chapter 4. Neither were they considered to have a significant effect on the local economy. Losses of wilderness values are documented in the No Wilderness/No Action Alternative for each WSA and in the Partial Wilderness Alternative for the Bull Gulch WSA.

4 BLM further states that what wilderness support there is comes from "younger residents, more recent arrivals, and residents in the resort area" (pp. 10, 27, 53, 78, Technical Supplement), without acknowledging that these do, in fact, constitute the majority of the local population.

According to Table 4-13, p. 75, of the DEIS, less than half of the population of the tri-county region lived there 20 years ago, and the ratio of newer to older residents gets larger each year. Recommending only 4% of the RA as wilderness in deference to this clear majority does not seem to be an entirely unreasonable gesture.

The Supplement gives short shrift to the 1981 Walsh-Loomis Study of wilderness economics, stating on p. 4 that it covers too large a scale to be locally relevant. However, a survey of local preferences using the same format, but scaled down to a regional sample, is feasible, according to John Loomis, one of its authors. We recommend that the BLM conduct such a study before making its final wilderness recommendations, in order to provide a more accurate reading of public opinion than what is currently available.

Current, regional needs for wilderness are only one part of a picture in which BLM needs to evaluate long-term, national needs for wilderness, as well. Over half of Colorado's wilderness visitors are from out of the state, as Colorado's wilderness areas come to be seen as a national (and even international) resource!

Short of doing a Harris poll, it seems safe to guess that a majority of Americans would not look favorably upon the BLM's plans to leave open its last remnants of pristine land for roads, timbering, minerals development and ORV use.

Section 202 of FLPMA mandates that the BLM weigh the "long-term benefits to the public against short-term benefits." A long-term perspective indicates a need for more wilderness in the Glenwood Springs region. With wilderness use growing between 8-10% per year, some wilderness areas in the state could reach capacity in 25 years. Areas like Flattops and Eagle's Nest are particularly vulnerable to overcrowding due to their proximity to urban areas. 30,000 acres of additional wilderness nearby would help absorb that overflow, and ensure that opportunities for solitude still exist 25 years hence.

The DEIS's recommendation of only 340 acres for wilderness may also be in violation of the BLM Wilderness Study Policy, which calls for the setting aside of roadless areas for multiple-use purposes. According to the Federal Register, Vol. 47, No. 23, February 3, 1982, a report of the House Interior Committee states:

Emphasis should be on multiple natural values of roadless areas as part of an overall multiple use framework . . . rather than primarily recreational uses. [Emphasis added.]

## Response 4

The comment that a majority of residents oppose wilderness was removed from this Final Wilderness EIS. This information comes from a study conducted by the BLM's Colorado State office for the Glenwood Springs Resource Management Plan (RMP). Discussions with "categorical leaders and community knowledgeable" were held in 1979 and 1980 to assess the attitudes and values of area residents. The discussions centered on community attitudes toward management and development of resources managed by BLM. A copy of the report is in the resource area files.

The public comment sections in the technical supplement to the DEIS summarized the comments on the WSAs received as of the date of publication of the DEIS. The Wilderness Study Report that will be prepared will include a summary of the public comments received on the DEIS.

As stated in the BLM's Wilderness Study Policy, the BLM wilderness study process will consider comments received from interested and affected publics at all levels--local, state, regional, and national. Wilderness recommendations will not be based exclusively on a vote-counting majority rule system. The BLM will develop its recommendations by considering public comment in conjunction with its analysis of a WSA's multiple resource and social and economic values and uses.



Multiple uses in addition to recreation, which are served by wilderness designation, are watersheds, water quality, wildlife habitat, protection of natural plant communities, etc. "The extent to which the area under study can provide such benefits will contribute to its suitability for wilderness designation." (Federal Register, Vol. 47, No. 23, February 3, 1982.) Wilderness recommendations for Bull Gulch, Castle Peak, and Hack Lake would enhance such multiple uses and would assure the Glenwood Springs BLM of meeting its Congressional mandate on multiple use.

5 BLM acknowledges the values of wilderness for multiple uses in its statement on Eagle Mountain WSA that "opportunities would exist to use the WSA . . . as a benchmark to study changes induced by man and to study unmodified natural processes" (p. 13, Technical Supplement). Why has this same opportunity not been recognized in the case of the even larger, more unique areas of Hack Lake, Bull Gulch, and Castle Peak?

FLPMA goes even further in saying that BLM land use plans shall "consider the relative scarcity of the values involved and the availability of alternative means . . . and sites for the realization of these values" (Section 202). Considering the small percentage of the RA which can still provide wilderness values, the relative scarcity of the values provided by the three WSA's is uncontestable. Nor are there any alternative means of realizing these values available elsewhere in the Resource Area.

Not to consider the relative scarcity of wilderness on its lands and to act accordingly constitutes a flagrant violation of this provision of FLPMA on the part of the Glenwood Springs BLM.

#### CASTLE PEAK

Castle Peak WSA is a rolling, mid- to high-elevation upland covered with "grassy meadows interspersed with ponds and dense stands of spruce/fir" (Technical Supplement). The area is crowned by the "unusual basalt geological formation of Castle Peak, which differs substantially from the geology and scenery of the surrounding locale." According to the Supplement, the "primeval" character of the area offers a contrast to the surrounding, more built-up areas.

Castle Peak contains Class A scenery, panoramic vistas, abundant wildlife, including mountain lion, elk, waterfowl, and birds, supporting in part by the habitat provided by the dead, standing timber in the area.

A wilderness decision on Castle Peak involves a number of trade-offs. For example, Castle Peak is one of the Resource Area's three best big-game hunting areas (p. 74, RMP/DEIS), generating an annual personal income of \$105,000 in local expenditures and \$50,000 in personal income (p. 78\*). At the same time, Castle Peak is one of the areas with the highest timber harvest potential, with an annual potential yield of 469 MMBF (p. 80), which would secure approximately \$63,000 in personal income. Additionally, logging the area would clear dead timber left from a beetle infestation 40 years ago, and help reduce the fire hazard which currently exists in the area.

In the PA, the BLM proposes to road the area for the purposes of timber cutting, reducing the fire hazard, clearing areas for forage, improving aquatic habitat, water yield projects, and ORV recreational opportunities. None of these reasons, in our opinion, presents a compelling need to sacrifice the wilderness attributes of this small remaining pristine area.

The timber potential is marginal, by any measure, compared to the wilderness values which logging and ORV use would forego. Castle Peak's portion of the BLM statewide allowable harvest figure (13 MMBF per year) would be only 3.6%. Its contribution to the timber potential of the nearby White River National Forest (100-153 MMBF) is an inconsequential .04%. Regional demand has dropped dramatically in recent years, to 12-16 MMBF for saw timber, and 20-22 MMBF for deadwood, according to John McCarthy, WRNF Forester. White River's major buyer, Kaibab Mill, has closed, along with most other mills in the state. The White River Forest contains a backlog of sawtimber because of the mill closing, and its capacity is eight times larger than the demand. Nevertheless, the Forest Plan calls for up to 28,000 acres of new timber harvest, and up to 54 miles of new roads.

Even were the timber industry to revive in future years, the region's capacity so far exceeds demand that it is safe to guess that Castle Peak's negligible timber contribution will never be in serious demand.

According to the Supplement, wilderness is a scarce resource and becoming scarcer. Seen in a future perspective, how much more of a contribution to public well-being Castle Peak will be as a small remnant of a dwindling ecosystem than as a brief provider of unneeded timber.

6 Foregone by wilderness designation will be \$63,000 of personal income which would be generated by timber harvest in Castle Peak. Yet the rationale on p. 82 of the Supplement fails to mention the adverse effects of non-wilderness on the \$105,000 in personal income currently produced by non-motorized uses of the area (mostly hunting).

\*Page numbers refer to the Technical Supplement, unless otherwise indicated, throughout this section.

#### Response 5

This value would also exist in the Hack Lake, Bull Gulch, and Castle Peak WSAs if designated as wilderness and is documented in the text of this FEIS.

#### Response 6

Neither wilderness nor nonwilderness were considered to have a significant effect on terrestrial wildlife or hunting opportunities. Under either the All Wilderness or No Wilderness alternatives, projected populations of deer and elk would be the same and visitor use associated with hunting is expected to remain at current levels unless additional access can be acquired.



7 The rationale also fails to point out, as stated on page 102 of the DEIS, that an undetermined portion of the timber income would occur outside the Resource Area.

8 Due to increased pressure on nearby wilderness areas, because of fast growing wilderness use (estimated to be between 8-10% per year), it is unlikely that the economic benefits from wilderness designation would be minimal because most of the increased use would "be displaced from nearby areas" (p. 85). Nor is it true that income derived from wilderness uses of the area would not be affected by roading and other non-wilderness development of the area (p. 80).

9 It is misleading, for example, to state on page 90 that zoning classifications for utilities facilities in Castle Peak would protect elk calving areas, without also pointing out the opposite effects of roads and human use on calving grounds. It is likewise misleading to declare that aquatic wildlife would be adversely affected by wilderness designation because improvements would not be possible (p. 90), without mentioning erosion and other adverse impacts to aquatic habitats from roading.

10 Here and elsewhere, the Supplement gives the erroneous impression that wildlife and wilderness uses could continue largely unaffected by the proposed non-wilderness uses, even though, as stated on page 87 of the DEIS, naturalness would be lost "forever" throughout the WSA.

An important question concerning Castle Peak is the fire hazard posed by the dead timber in the area. Let it be said from the outset that fire is a natural process which opens up forage for wildlife, gives rise to a natural plant succession, and that Castle Peak should be as a place where this process could take its course without man's interference.

In weighing the merits of various approaches to the fire hazard in the area, the example of the Flattops Wilderness Area is instructive. Flattops received its designation despite an identical fire hazard problem.

Opinions as to the probability of fire in such an area differ considerably. McCarthy, of the WRNP, feels that the potential for fire is increasing right now because windfall and other factors are causing the wood to become broken up. He also feels that the amount of fuels build-up would prevent a forest fire in Flattops from being kept within reasonable limits.

#### Response 7

This FFIS in Chapter 4 points out that forest production in the Bull Gulch and Castle Peak WSA's (total allowable cut is .65 million board feet) is very small when compared to the allowable harvest of 35.9 million board feet on the surrounding White River National Forest. Therefore, a major portion of the income from timber production is from outside the resource area.

#### Response 8

The U.S. Forest Service estimates the carrying capacity of seven wildernesses on the White River National Forest will not be reached until about the year 2000 (Draft Environmental Impact Statement for the White River National Forest Land and Resource Management Plan). Estimates indicate wilderness recreation use of the four WSAs, if all were designated as wilderness, would be less than one percent of the total use in the local region and would not be significant in satisfying future wilderness recreation demand.

In the context of the comment, "overflow" is synonymous with "displacement" as used in the DEIS and FFIS on the RMP since both terms refer to a shift in the location of use.

#### Response 9

Roads constructed and maintained with adequate design considerations, as required by the required management stipulations adopted in the RMP, are expected to have no significant adverse effects on erosion, water quality or aquatic habitat. Elk calving grounds would be avoided because of the required management stipulations in the RMP. Most of the roads would be closed following harvesting which will reduce impacts of human use.

#### Response 10

There are many actions or degrees of actions that would impair naturalness as defined in the Wilderness Act but would have a different effect on other resources including wildlife and recreation. For example, activities such as timber management would not significantly affect wildlife habitat or populations but would substantially impair naturalness.

On the other hand, he and other foresters point out that the right combination of aridity and wind which would precipitate a bad fire rarely occur at this high elevation, as indicated by the fact that 75% of Flattops Wilderness has experienced no fire in the 40 years since the beetle infestation. Also, a study of the probability of fire in the area found the risk to be low.

Furthermore, fire control in wilderness areas not ruled out by the Wilderness Act, and, in fact, is permitted with certain stipulations in the Flattops area. The Flattops Fire Management Plan, for example, specifies how long and on how much acreage a fire can be permitted to burn, depending on the soil vulnerability of the area, and whether the fire was naturally ignited or man-caused. The regional forester may even authorize use of helicopters or bulldozers, if necessary.

We propose that a fire management plan similar to the Flattops can be devised for Castle Peak, such that in the rare event a fire started, it would at least have a chance of being kept within reasonable bounds (dependent on the fuel build-up, wind, etc.). Meanwhile, the area would be spared the ravages of development.

One might even venture to guess that over the long term, considering the low risk of fire, that the effort, expense, and adverse impacts associated with the control of future forest fires, might come to less than those which will surely result from the diverse developments proposed in the Preferred Alternative.

11 Roading for the purpose of wildlife habitat management is another debatable issue. Wildlife experts agree that elk need the cover and thermal barriers provided by dense tree stands, and also the mobility and browsability provided by open meadows. The question is in what combination.

The Technical Supplement does not indicate whether the balance of these needs is currently deficient in Castle Peak or whether correcting any identified imbalance by roading would outweigh the adverse impacts (noise and stress) on wildlife of these very same roads and human activity.

The substantial short-term decline in big game, described in the Technical Supplement, would take a large toll on the local economy, while the projected long-term gain in big game is highly questionable, considering that there is no plan to close the roads after habitat improvements and timbering are completed. Rather, they will be left open for ORV use, continuing the impacts of noise and stress associated with human use. Also not mentioned in the Technical Supplement is that the long-term gains in big game will be at the expense of wildlife diversity which now thrives in Castle Peak's undisturbed ecosystem.

#### Response 11

Under the proposed Action, public access into the Castle Peak area would continue to be limited to designated roads and trails. In addition to the above limitations on access, if it became necessary, other limitations outlined in Appendix I would be applied. These stipulations include but are not limited to seasonal closures. This access is required for management of other resources. Public access often allows better big game harvest thus reducing the pressure on the winter range for food. Increased public access to Castle Peak was identified as a need by the Colorado Division of Wildlife during the scoping process for the RMP.

The location, number, and type of roads into an area will be made through a site-specific analysis prior to implementation of a project. Following completion of a project, any roads will be evaluated on a case-by-case basis to determine if they should be closed or remain open to public use.

None of the actions identified within the Castle Peak WSA would be expected to significantly affect wildlife diversity.



- 12 Moreover, the final RMP/DEIS fails to clarify whether erosion associated with roading will conflict with plans for aquatic and riparian habitats.

- 13 Concerning the need to leave Castle Peak open for ORV use as a "scenic area for family camping" (p. 91), this is clearly not an urgent priority considering 1) the "relatively low ORV use presently occurring in the WSA" (p. 81); 2) "ORV use on public land is a small percentage of the total use for the region (DEIS, p. 172); 3) 80% of the land area in the RA is open to ORV use in the Preferred Alternative; 4) 30 times more land in the RA is available for motorized than for non-motorized recreation; and 5) according to map 3-19, large amounts of new roaded areas will be opened up in all alternatives.

Even if roading in Castle Peak was justified on other grounds, it can be questioned on budgetary grounds alone. At a rough estimate of \$5,000 per mile, it is unlikely that any of the proposed roaded uses would prove cost-effective, especially in light of the reliable and proven hunting income which would be lost in the process.

- 14 The BLM's management schemes for Castle Peak also assume a large budget for the non-productive resources, such as water and wildlife, which is somewhat doubtful considering the minerals emphasis currently in effect throughout the agency. In a time of uncertain future funding, Castle Peak's multiple resources are better and more inexpensively managed by wilderness management than by production uses.

In sum, the Colorado Wilderness Network believes that, despite the temptation to exploit Castle Peak's marginal timber and ORV potential, these resources are more replaceable than wilderness. Therefore, the long-term public interest is better served by Castle Peak as wilderness.

#### BULL GULCH

- 15 The last minute rejection of Bull Gulch for a wilderness recommendation is questionable in the extreme. The area has received close to unanimous support in the public comments cited in the Technical Supplement, at open houses in May 1982, and at public hearings in December 1982. Agency support, as well, is evident in the Supplement's glowing description of the area's wilderness qualifications, following which the rationale for a non-wilderness recommendation appears highly incongruous.

The area has little potential in the way of timber, minerals, ORV use or habitat management. Most of the small quantities of these resources which do exist in the area are located in places where rugged terrain makes their development uneconomical.

#### Response 12

This impact would be minor due to the lack of storage structures on local streams and the small amount of additional sediment contributed to major downstream structures when the Colorado River system is considered as a whole. In addition, impacts would be minimized by constructing roads to BLM standards and by including mitigating measures recommended during the site-specific planning stages. Drainages affected by increased sediment yield are listed in Appendix H (DEIS) for each alternative. The anticipated increases in sediment yield on drainages in the Bull Gulch and Castle Peak WSAs are identified in Chapter 4 of this FEIS. No plans have been made to mitigate injury to dams and other structures. Site-specific analysis of soil movement would be conducted before project implementation.

#### Response 13

The BLM did not identify the need to leave Castle Peak open for ORV use as a "scenic area for family camping." Rather, the quote is from a public comment received during the intensive wilderness inventory on the Castle Peak unit.

#### Response 14

Management of wilderness recreation is not necessarily cheaper than management of other types of recreation, including motorized recreation. It may be more expensive depending on amounts of use, the capability of the area to accommodate that use, and the fact that the area may have to be protected from overuse that would degrade the values and experiences that attract the use in the first place. Although the impacts of nonmotorized recreation could be fewer and lesser in degree than motorized recreation, the threshold of acceptable impact could also be lower.

#### Response 15

The recommendations and rationale in the DEIS were based upon the application of the planning criteria and quality standards in BLM's Wilderness Study Policy that are documented in the DEIS and the technical supplement to the DEIS.

The recommendations in the RMP and this FEIS also consider the information and opinions in the comments received during the formal public comment period on the DEIS. Based partly on public comments, 10,414 acres in the Bull Gulch WSA are now recommended suitable for wilderness designation.

The timber and woodland resources recommended for management in the nonsuitable portion of the Bull Gulch WSA under the Proposed Action would be physically accessible and some stands are accessible using existing roads. All areas identified for management are on slopes less than 40 percent.

The fuelwood resources in the WSA would represent approximately 9 percent of the total potential annual allowable harvest level under the RMP. In addition, piñon and juniper are preferred over other species because of their high BTU outputs. Woodland products are recently in demand, particularly in the Eagle-Vail area where a commercial retail price of \$135 for a cord of wood is not uncommon. Other factors such as accessibility, distance, and benefits to other resources must also be considered.

At the same time, Bull Gulch preeminently fulfills all the qualifications for wilderness, including naturalness, solitude, and opportunities for primitive recreation. Most striking is the area's unusual diversity of land forms, geological formations, vegetation, wildlife, ecosystems, and opportunities for a wide variety of non-motorized recreational experiences.

The area contains sandstone pinnacles, prairie falcon, bald eagles, and the same Maroon sandstone formations found in the Maroon Bells Wilderness. Bull Gulch contains Class A Scenery and outstanding recreational opportunities for Colorado River rafting, a sport which generates \$200,000 annually in sales, as noted in the Technical Supplement.

In the face of this overwhelming evidence for a wilderness recommendation, the Bull Gulch rationale appears an unsubstantiated fabrication at best. The rationale in no way follows from the preceding analysis, and contains several telling inconsistencies. It states first that administrative restrictions (ACEC, ORV closures, etc.) will protect the area, making wilderness designation unnecessary, while two sentences later we find that non-wilderness status will eliminate conflicts with future minerals and timber development. The contradictions are obvious. If non-wilderness status will allow timber and mineral development, the administrative "protection" measures apparently will not protect the area. Since the area's minerals and timber resources are insignificant (pp. 126 and 146, RMP/DEIS, and elsewhere), why then do we have to keep the area open for this development? BLM is trying to have it both ways, but there is no such thing as part wilderness!

Exclusion of Bull Gulch based its alleged lack of diversity is also unfounded. Page 51 of the Supplement states that the vegetative type represented by Bull Gulch (piñon-juniper) is unique regionally, but common to many Wilderness Study Areas under review by the BLM elsewhere in the Rocky Mountain region.

- 16 This statement fails to acknowledge the many other vegetative types also found in the WSA and its unusual geologic formations, the particular combination of which is surely not found in any other WSA. That BLM is able to claim that Bull Gulch is not unique nationally illustrates once again the inadequacies of the Bailey-Kuchler Vegetation System in accurately pinpointing diversity. The Bailey-Kuchler System not only fails to break down vegetative types into small enough sub-classes, but leaves out geologic, hydrologic, topographic, elevational, and other types of factors which should be included in an analysis of diversity.

Even if the combination of characteristics found in Bull Gulch could be found in other WSA's, its value in providing an alternative type of wilderness experience within a region dominated

#### Response 16

The Bull Gulch WSA was recognized as being ecologically different from existing wildernesses locally. However, numerous other wilderness study areas in the western United States possess this same ecological characterization. The effects of designation or nondesignation on diversity in the National Wilderness Preservation System on a regional or national level cannot be determined until the studies are completed for these other areas.

The BLM's Wilderness Study Policy directs the use of Bailey-Kuchler system. The variety of vegetation and geological features within the WSA are identified as special features and the opportunities for primitive and unconfined recreation are documented (see Chapter 3).



17 by high-elevation, spruce/fir types of wilderness is reason enough for including it in the National Wilderness Preservation System.

Bull Gulch is also one of the few WSA's of the pinyon-juniper type located within convenient driving distance of Denver

In addition to an unconvincing rationale, several technical issues concerning Bull Gulch need to be addressed in the final wilderness EIS. A recent 10th Circuit Court ruling changes the way in which pre-FLPMA leases are to be handled in WSA's. Previously, BLM assumed it had no control over development of these leases in WSA's, and that future development would jeopardize the manageability of wilderness areas containing them.

18 The 10th Circuit ruling says that leases can be developed only if they contain valid existing rights, and this must be determined on a case-by-case basis. Since Bull Gulch was found unsuitable for wilderness, in major part to provide flexibility for development of its pre-FLPMA leases (p. 67), the BLM will now need to go back and determine whether any of these leases do in fact contain valid existing rights whose development could jeopardize wilderness values. Both the analysis and the rationale will have to be rewritten accordingly.

A recent Department of the Interior decision also requires revision of the final Bull Gulch analysis. BLM managers have been directed to redraw boundaries of WSA's so as to exclude any portions containing non-federally owned subsurface minerals, and then to re-evaluate their wilderness potential. Since Bull Gulch's "split estate" section lies squarely in its middle, the area's WSA status would seem to be in question if this directive is taken literally.

20 However, the subsurface minerals are state-owned, and the state of Colorado has strongly expressed its willingness to facilitate land exchanges which will improve manageability of BLM's wilderness and other sensitive lands. In following the DOI directive, we urge BLM to take a strong stand in preserving Bull Gulch's WSA status by making a wilderness recommendation which specifies that such a trade should take place. The BLM should also keep in mind that split estate lands inside wilderness are no worse from a manageability standpoint than inholdings, and many a wilderness has been recommended, inholdings notwithstanding!

21 Finally, another directive from the Secretary of the Interior indicates that no oil and gas leases are to be issued in WSA's as of December 1982. We trust that the Glenwood Springs BLM is carrying out this directive with regard to all of its WSA's.

#### Response 17

The WSAs are within a day's drive (5 hours) of Denver and four other major urban areas in the state. However, the significance of providing wilderness opportunities within a day's drive of major metropolitan areas (SMSAs) is low because of the supply of existing wilderness and other potential wilderness that are also within a day's drive of these cities.

Bull Gulch and Castle Peak have limited legal access, and Hack Lake has limited convenient physical access because of topography. Limited access could discourage visitation and overuse but could also channel use into a few areas and cause overuse of those areas.

#### Response 18

According to a Department of the Interior Solicitor's opinion dated 12/10/82 on the 10th Circuit Court of Appeals ruling and current Bureau policy, BLM's interim management policy on pre-FLPMA leases in effect since 1981 has not changed, and the analysis in the DEIS of the effect that pre-FLPMA leases would have on manageability was correct. However, since the DEIS was published, all pre-FLPMA leases have expired and the analysis in this FEIS reflects the current situation.

#### Response 19

The U.S. District Court for the Eastern District of California issued a decision on April 1, 1985, in *Sierra Club v. Watt* concerning certain lands deleted from wilderness review in 1982 and 1983. This decision restored to wilderness review all lands having split surface and sub-surface ownership including the 636 acre parcel in the Bull Gulch WSA where the sub-surface (mineral) estate is owned by the state.

#### Response 20

Under the Proposed Action and All Wilderness Alternative, efforts would be made to acquire the mineral estate from the State of Colorado. Current policy is not to attempt such exchanges until an area has been designated as wilderness by Congress. The state-owned minerals do present a manageability problem because of the access and development rights that would be tied to any leases issued by the State. However, the problem is considered to be minor because of the low mineral potential.

#### Response 21

This prohibition is in effect. Under current policy, no new leases can be issued within the WSAs until Congress would release an area through legislation.

#### HACK LAKE

Much of the above discussion of problems with Bull Gulch's non-wilderness recommendation rationale apply also to Hack Lake. Like Bull Gulch, Hack Lake has outstanding wilderness characteristics, few conflicts, and the BLM's rationale is inconsistent with its analysis. In addition to its scenic, wildlife, backpacking, and hunting opportunities, Hack Lake also provides good fishing opportunities. The area contains threatened Colorado River Cutthroat Trout, and, as with Bull Gulch, neither its timber, mineral or ORV potentials are significant (pp. 20 and 31).

22 Despite its undeniable wilderness qualifications -- easy manageability and lack of conflicts -- the BLM appears to have engineered Hack Lake's elimination through a rationale which seems arbitrary and contrived. Among the Quality Standards which BLM is required to use in evaluating its WSA's is "consistency with other governmental plans." The BLM rejects Hack Lake on the grounds that, because Congress has not conferred wilderness designation on areas which, like Hack Lake, lie below Flattops Wilderness rim, it does not intend these areas to be wilderness.

A review of the Hearing Record on the history of Flattops' Wilderness designation reveals nothing to warrant this conclusion. There is no reason to believe these neighboring areas might not be considered for wilderness at a future date. Even if they are not, the BLM is not prevented from recommending Hack Lake through its own separate and distinct wilderness study process.

If fact, BLM should take the initiative in this, since a wilderness designation for Hack Lake could lead to the designation of nearby areas, as well. Natural areas throughout Colorado with jurisdictions split between the Forest Service and the BLM risk losing their natural values because of the refusal of the two agencies to collaborate in their protection. Hack Lake is no exception.

More important, BLM has not weighed the "consistency" argument equally with the other Quality Standards. Clearly, the consistency standard has been given undue consideration, to the exclusion of other Quality Standards, such as naturalness and "effects of wilderness on other resources," whereas a balanced appraisal of all standards most likely would have produced a wilderness recommendation.

Like Bull Gulch's rationale, Hack Lake's rationale will need revisions in the final wilderness EIS, to bring it into line with the preceding analysis.

#### Response 22

A letter received from the U. S. Forest Service in July 1981, stated it was their interpretation that Congress intended for the wilderness to be located above the topographic rim. An additional comment from the U. S. Forest Service received during the public comment period expressed the concern of manageability on nonwilderness national forest lands and the fact that the entire Hack Lake WSA is tied to the Flat Tops by only two narrow strips of land.



In sum, the Colorado Wilderness Network recommends wilderness status for all four wilderness study areas, Castle Peak, Bull Gulch, Hack Lake, and Eagle Mountain. Information in the two documents, together with the increasing need for wilderness, show these areas not to be redundant, unnecessary wilderness resources, as BLM would have us believe. Rather, they form part of a rapidly disappearing resource whose material and spiritual values grow with each passing year.

Local and national opinion, local economic needs, and ecological necessity in terms of preserving species diversity, point toward a wilderness recommendation for all four WSA's.

## UNIVERSITY OF COLORADO WILDERNESS STUDY GROUP

PEREGRINE  
FALCON

Al Wright, Area Manager  
Bureau of Land Management  
P.O. Box 1009  
Glenwood Springs, CO 81602

January 21, 1983

Dear Mr. Wright,

I am writing to be included in the public comment period of the Glenwood Springs RMP. I have enclosed proposals written by the CU Wilderness Study Group and agree with their recommendations on Hack Lake, Bull Gulch and Castle Peak to be designated as Wilderness Areas. I do not feel that it is adequate to not designate a wilderness study area as Wilderness simply because its current management is as a wild and primitive area. Management has been known to change and once a piece of land has been changed from wilderness to other uses, it can never be returned to its original wild state. All three of those areas are wild and pristine now and have unique qualities which make them prime candidates for inclusion in the National Wilderness Preservation System. Please consider the consequences possible for lack of future thought when managing public lands.

Thank you

*Denise Dralle*  
Denise Dralle  
1004 14th St. Apt. 3  
Boulder, CO 80302

RESPONSE TO COMMENTER 34

Thank you for your comments.



BULL GULCH WILDERNESS STUDY AREA  
(CO-070-430)

University of Colorado  
Wilderness Study Group  
May, 1981

BULL GULCH WILDERNESS STUDY AREA(CO-070-430)

The Bureau of Land Management(BLM)is currently in the study phase of its review of unappropriated public lands for the purpose of ultimately designating certain lands as wilderness. As directed by the 1976 Federal Land Policy Management Act, the process of review involves Initial and Intensive Inventories, public comment periods, information soliciting, and finally, designation of the reviewed lands as either Wilderness Study Areas(WSA), or non-wild public land.

Bull Gulch, Inventory number CO-070-430 is a WSA in the Glenwood Springs Resource Area, Grand Junction District. Bull Gulch is south of Burns, Colorado, and is bordered entirely on the west side by the Colorado River in Eagle County. Bull Gulch WSA is 15,000 acres, and has been extensively subdivided, primarily to exclude ways and roads.

Natural Characteristics

Bull Gulch is relatively dry, receiving 25 to 35 inches of precipitation a year, most of which is snowfall. The elevation varies from 6400 feet along the Colorado River to 9700 feet along the southeastern boundary. The topography is very rugged. Most of the unit comprises of side canyons of the Colorado River. Bull Gulch itself is an interesting canyon because of its red rock cliffs, which are the same rock formations as those at Maroon Bells. There are also interesting pinnacle formations near Jack Flats. Bull Gulch has many diverse ecosystems. Along the Colorado River and in some of the side canyons there is a riparian plant community. North and northwest facing slopes are dense with aspen, spruce, and Douglas Fir stands, with areas of Ponderosa pine in the lower Meadow. The canyons in lower elevations have pinyon-juniper on their sides, while grasses, broomweed, and sage brush, grow on rugged canyon walls, gypsum hills and in the numerous meadows in the unit. There are three soil types found in Bull Gulch. The Hoplargids-Usorthents-Argiborolls association is characterized as cool, shallow to deep, well-drained soil found on level to moderately steep slopes on foothills and fans. The Haploborolls-Agriborolls-Eutroborolls association is cool, shallow to deep, well-drained soil found on level to moderately steep benches and mountain slopes. The Calciborolls-Haploborolls-Haplargids association is cool, shallow to moderately deep, well-drained soil found on sloping to steep benches and mountain slopes.

Resources

Wildlife:  
Bull Gulch has a great abundance and diversity of wildlife.



The Colorado Division of Wildlife has identified parts of Bull Gulch as critical muledeer and elk winter range. The unit's major game species include mule deer, elk and black bear. Coyotes, pikas, gophers, porcupines, squirrels, chipmunks, raccoon, and snowshoe hare are common small game. Blue grouse live in the more wooded valleys and ptarmigan find shelter in the sagebrush and meadows. Both prairie falcons and Bald eagles nest in Bull Gulch, and there is a good possibility that mountain lion are found in the unit. The Colorado River contains many popular fish species including native, rainbow, and brown trout, and largemouth bass.

The wildlife resources would definitely better protected if the area was given Wilderness designation.

#### Timber:

Timber is sparse in the unit, but a little fence post and firewood gathering does take place in the unit, although this is very minimal. Firewood gathering takes place only on the plateau above the Colorado River, and in the southernmost portion of the unit. No large scale logging is possible because of the scarcity of timber. Ponderosa pine is the major fuelwood source, although some people will take aspen and fir. If the area was closed to firewood and fencepost gathering it would have little effect upon the people living near the area because of the close proximity of White River National Forest.

#### Grazing:

Grazing does take place within the Bull Gulch WSA, but has little effect upon the area's naturalness and is compatible with wilderness designation. The following allotments are entirely or partly within the the Bull Gulch Unit:

#	NAME	LESSEE	AUMs
8616	Deer Pen Gulch	Bent Land Livestock	900
8625	Bull Bulch Common	Eagle Range Land & Albertson Cattle Co.	526
8639	Upper Cottonwood	Brush Creek Eagle River Co.	265
8642	Trail Gulch AMP	Luark	655
8643	Blowout AMP	Leroy Mayn Ranch	535

#### Minerals:

No minerals have been identified to exist in economically valuable amounts or locations within the unit. Potential for mossrock and sand and gravel extraction is limited, and would be expensive. Gold placer claims have been staked on the eastern boundary of the unit. Gypsum also may be potentially mined along the Colorado River.

There are eleven oil and gas leases located in the Bull Gulch unit totalling 9735 acres:

Lease #	Lease Date	Lease Acreage
C-15861	5/1/72	458

C-16559	9/1/72	46
C-16560	9/1/72	1184
C-19399	12/1/73	2318
C-20518	6/1/74	500
C-20520	6/1/74	547
C-20553	6/1/74	630
C-20555	6/1/74	1653
C-20818	9/1/74	40
C-23483	5/1/76	342

There is no oil and gas exploration occurring in the unit.

#### Recreation:

Recreational potential within the unit is great. The visitor can undoubtedly experience solitude, and the landscape is conducive to primitive recreation, backpacking, hiking, photography, bird watching, wildlife study, botany, etc., are all activities which are well suited to the Bull Gulch area. Rafting the Colorado River on the western boundary is popular and Jack Flats serves as a scenic picnic area. Hunting and fishing are the most common forms of recreation in the unit.

#### Water:

There are two sources of water in the unit; the water in the Colorado River, and the springs within the unit. The developed springs are poorly maintained, and are only used for grazing. The uneven terrain tends to funnel-off surface water, and the depth to ground water averages over eighty feet. Runoff is high and soil permeability is low to moderate. Spring water would probably be better protected through Wilderness designation.

#### Recommendation

The University of Colorado Wilderness Study Group recommends that Bull Gulch Wilderness Study Area be designated Wilderness. The area is particularly unique because of its geologic features, vegetative diversity, and wildlife abundance. Bull Gulch can be considered one of the real gems of the Colorado Bureau of Land Management Wilderness Review. We most assuredly feel that wilderness designation will allow or enhance more of the areas resources than it will restrict them, and that preserving this unique Wilderness Study Area is the logical goal.

#### Sources

- 1) Bureau of Land Management Case Files; BLM District Office, Denver, Colorado
- 2) Bob Miller; Colorado Division of Wildlife, Denver, Colorado. 825-1192.
- 3) Jim Habbit; Wilderness Planner, BLM District Office, Glenwood Springs, Colorado. 945-2341
- 4) Soil Maps; Eagle and Garfield counties.



## HACK LAKE WILDERNESS STUDY AREA(CO-070-425)

University of Colorado  
Wilderness Study Group  
May, 1981

## HACK LAKE WILDERNESS STUDY AREA(CO-070-425)

The Bureau of Land Management(BLM)is currently in the study phase of its review of unappropriated public lands for the purpose of ultimately designating certain lands as wilderness. As directed under the 1976 Federal Land Policy Management Act, the process of review involves Initial and Intensive Inventories, public comment periods, information soliciting, and finally, designation of the reviewed lands as either wilderness study areas, or non-wild public lands. Wilderness Study Areas must be 5000 acres or more, or be contiguous to existing wilderness. It must be determined to have outstanding opportunities for solitude or primitive, unconfined, recreation. The latter determinant is, of course, subjective. Final Wilderness Study Areas are to be managed in a way "that the BLM has determined does not impair the land's suitability for preservation as wilderness." Mining activities, if governed by the 1872 Mining Law, take precedent over all other activities, and Grandfathered Uses, those undertaken prior to 1976 FLMPA, are also allowed, in the interim study period. Final classification of these lands will be in 1992 on the basis of wilderness values.

Hack Lake, Inventory number(CO-070-425)is a wilderness study area in the Glenwood Springs Resource Area, Grand Junction District. Hack Lake WSA is 7,600 acres, and is contiguous to Flat Tops Wilderness Area, along the WSA's northern boundary. The Eagle/Garfield County line passes through the area.

Natural Characteristics

Hack lake is a very diverse area. It is dry in lower elevations, while being relatively lush in higher elevations. The altitude ranges from 7,600 feet to 11,034 feet in the northwest corner of the unit. The area exhibits a range of communities from desert, dry with cactus and sparse grasses, to lush stands of aspens along the Hack Creek drainage, and spruce-fir woods around the lake area. Hack Lake's topography can be summed up as being the slope of mountain, with its summit in the Flat Top Wilderness. There is one type of soil found in the Hack Lake Unit, which is the Cryoboralls-Cryoboralls-Cryorthents. This tends to be a cold, deep to shallow well-drained soil found on sloping to steep mountain sides and mesas.

Natural ResourcesWildlife:

An important resource in the Hack Lake WSA is wildlife.



Contiguous to Flat Tops Wilderness Area, Hack Lake WSA has much of the same wildlife. While a major herd of 20,000 elk roam the Wilderness, only an isolated, static herd of 600 elk are contained within the WSA. Major game species include elk, mule deer, Black bear, and mountain lion. Small game include blue grouse, ptarmigan, snowshoe hare, red fox, coyote, weasel, marten, beaver, squirrels, chipmunks, gophers, pikas, porcupines and marmots. Fowl include mallards and teal.

Hack Lake is stocked and supports a reputedly large population of native trout. Also found are rainbow and brook trout. According to the proprietor of the Sweetwater Lake Resort, Larry Gay, fishing is the single most popular recreation in the unit.

#### Grazing

Grazing is currently a major use within the unit, but since grazing is allowed in a wilderness area, it is not considered a conflict with wilderness designation. The following allotments are within the Hack Lake Wilderness Study Area:

NUMBER	NAME	LESSEE	AUMs
8632	Upper Little Sheep Creek	John Burnel	338
8633	Upper Hack Creek	John Burnel	384
8634	Three Springs	Two Rivers Ranch	60
8627	Sugarloaf	John Burnel	50

#### Timber

Timber is very sparse within Hack Lake. The spruce and fir trees around the lake are young since the area is still recovering from a massive beetle kill in the 1940's. The trees in Hack Lake are not economically feasible for harvestation, especially with nearby areas abundant in timber.

#### Minerals

There are no mineral claims or leases in the area, although there could possibly be some potential for oil and gas exploration. Oil and gas exploration could be expensive and probably not economically feasible. A gold placer claim was made in the area about forty years ago, but no extraction took place. Moss rock is also in the area but no extraction has taken place.

#### Recreation

The recreational potential of the area is a major resource if not the largest resource. Recreational resources include the Ute Trail which long ago was used and maintained by the Ute Indians. The Ute trail follows the slope up to Hack Lake and the ridge. It continues on into the Flat Tops Wilderness. A log cabin is maintained by sportsmen, and is close to the lake. This cabin was built in the 1940's by a shepherd. Another cabin was built in the late 1880's but has disintegrated with time.

Hunting is another major form of recreation in the area. The Sweetwater Lake Resort, at the base of the Ute Trail, is one of the local outfitters and guides for Hack Lake and the Flat Tops Wilderness. Hunting season is the time of heaviest use.

Fishing is probably the year round favorite activity in the area. Hack Lake and probably Hack Creek are good for fishing. All of these forms of recreation would be protected through wilderness designation.

#### Water

Permanent water sources in the unit include Hack Lake, a couple of springs, and Hack Creek. Wildlife and people recreating use this water for drinking, etc. Wilderness would protect these water sources.

#### Recommendation

The University of Colorado Wilderness Study Group after doing field surveys and reviewing resource conflicts recommends that the Hack Lake Wilderness Study Area be designated Wilderness. Although there are problems with contiguity with the Flat Tops Wilderness, these problems can be



solved by requesting that the United States Forest Service (in its planning process) keep adjacent areas in a natural condition. The C.U. Wilderness Study Group found almost no resource conflicts with wilderness designation.

#### Sources

- 1) Bureau of Land Management Case Files; BLM District Office, Denver, Colorado.  
a) Hack Lake WSA(CO-070-425)
- 2) Bob Miller; Colorado Division of Wildlife, Denver, Colorado. 825-1192
- 3) Jim Habbitt; Wilderness Planner, BLM District Office, Glenwood Springs, Colorado. 945-2341.
- 4) Larry Gay, Owner, Sweetwater Lake Resort, Sweetwater Colorado. 524-9736.
- 5) Soil Maps of Eagle and Garfield Counties.



## COLORADO CATTLEMEN'S ASSOCIATION

Board of Control  
February 2, 1983

February 2, 1983

Mr. Alfred W. Wright  
Area Manager  
Bureau of Land Management  
Glenwood Resource Area  
P. O. Box 1009  
Glenwood Springs, CO 81602

Dear Mr. Wright:

At a recent meeting of the CCA Board of Control, held January 15, 1983, discussion was held as to the feasibility of Castle Peak and Bowl Gulch becoming a part of the wilderness system of Colorado.

The board pointed out that such consideration had been previously given and a study had been completed. One of our members, Mr. John Benton, has written to you outlining the concerns of adding Castle Peak and Bowl Gulch. The board reviewed Mr. Benton's documentation and voted unanimously to support his position.

Also discussed during the meeting was the problem of AUMs of which the board requests close scrutiny.

We appreciate your consideration of our support towards the withdrawal of Castle Peak and Bowl Gulch from wilderness consideration.

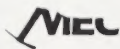
Sincerely,

*David G. Rice, Jr.*  
David G. Rice, Jr.  
Vice President  
Legislation/Federal Lands

RESPONSE TO COMMENTER 35

Thank you for your comments.





# MINERALS EXPLORATION COALITION

Minerals Advocate  
in Public Policy

12640 West Cedar Drive  
P.O. Box 15638  
Denver, Colorado 80215  
303-989-5567

February 2, 1983

Alfred Wright, Area Manager  
Glenwood Springs Resource Area  
P.O. Box 1009  
Glenwood Springs, CO 81602

Dear Mr. Wright:

These comments constitute the response of the Minerals Exploration Coalition (MEC) to the draft environmental impact statement - resource management plan on the Glenwood Springs Resource Area. The MEC is a coalition of exploration companies and individuals conducting exploration on federal lands.

In view of the fact that wilderness areas designated after December 31, 1983, will be withdrawn from appropriation under the mining and leasing laws, we believe that all areas with mineral and energy potential should be excluded from wilderness designation, even though no economic deposit is now known. The withdrawal limitations will preclude the collection of new data, and new areas of mineral potential will not be found. With new discoveries effectively stopped, the policy of excluding all currently known mineral potential from wilderness should be followed, so that exploration of these areas will not be restricted and minerals might yet be produced. Explorationists tend to look at the long term because the lead time of discovery may be ten to fifteen years. The impact of wilderness on minerals should be assessed over the long term (a century or more). We believe that land use decisions should be in conformity with the policy statements made in the National Minerals Program Plan and Report to Congress released by the President in April, 1982.

RESPONSE TO COMMENTER 36

Thank you for your comments.

## BOARD OF DIRECTORS

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Lakewood, Colorado

36

Page 2  
Alfred Wright-Glenwood Spgs. R.A.  
February 2, 1983

36

We call your attention to the mineral policy statement of the Bureau of Land Management. On page 20 of this document, the following statement is made: "to protect other resource values from damage associated with mineral activities, the BLM is allowed to withdraw lands for certain uses, thus closing them to mineral entry. The BLM may also place constraints on the associated mineral activities, such as no surface facilities".

On page 161, as part of the preferred alternative cumulative impacts on minerals, a list of land closures is shown; e.g., 98,852 acres of public and private land closed to mineral location; 55,770 acres of public and private land closed to oil and gas leasing; 42,344 acres closed to oil and gas surface facilities; 11,552 acres closed to mineral sales.

We have several concerns about the attitude BLM seems to have about withdrawing and closing lands to mineral entry.

1. These closed lands include a suitable wilderness area (Hack Lake), plus 3,456 acres of adjacent land. We contend that the interim regulations on wilderness management provide for the protection of resource values. We feel it is inappropriate to close these areas.

Withdrawals greater than 5,000 acres require congressional approval. We believe that any WSA that is deemed "suitable" by this study process should not automatically be a candidate for withdrawal action as a second layer of "protection".

2. Areas not recommended for wilderness are adequately protected by existing land use regulations and this land use plan without withdrawal. Any action to withdraw "non-suitable" WSA candidates could be viewed as an attempt to circumvent the entire BLM wilderness study program.
3. Included in these proposed closings are areas of private land. The MEC does not know of any law, regulation or court decision that allows the federal government to close private lands to leasing or sale. Because private lands are not open to mineral location, it is a moot point whether the federal government can close private lands to location.

The BLM is aware of the Interior Board of Land Appeals decision regarding wilderness consideration of tracts less than 5,000 acres and the subsequent removal of such lands from further consideration by the Secretary of Interior.



Page 2  
Alfred Wright-Glenwood Spgs. R.A.  
February 2, 1983

Eagle Mountain and Hack Lake have been so removed.

Thank you for the opportunity to comment on this draft environmental impact statement - resource management plan for the Glenwood Springs Resource Area.

Sincerely,

*John D. Wells*  
John D. Wells  
Managing Director  
MINERALS EXPLORATION COALITION







# **APPENDICES**

REQUIRED MANAGEMENT STIPULATIONS















# APPENDIX 1

## REQUIRED MANAGEMENT STIPULATIONS

These stipulations will be included in project designs and are considered standard operating procedures. Additional stipulations may be imposed depending on site-specific resource objectives and requirements.

5. Fire lines, angular or perpendicular to a drainage, will not be allowed within 300 feet of a drainage to reduce soil movement into the drainage system.
6. If visitor use causes adverse impacts on critical riparian habitat, the visitor use will be reduced until the vegetative conditions are restored.

### AIR QUALITY MANAGEMENT STIPULATIONS

1. Controlled burns and any other open burning will comply with BLM Manual Section 7723, *Air Quality Maintenance Requirements*, to minimize air quality impacts from resulting particulates.
2. Necessary stipulations protecting air quality from development will be included in leases, rights-of-way, and other BLM use permits.
3. All applicable local, state, and federal air quality policies, regulations, and statutes will be followed.

### AQUATIC AND RIPARIAN HABITAT STIPULATIONS

1. Surface-disturbing activities will be restricted in or near riparian areas.
2. Fences should be constructed to minimize impact to significant riparian and aquatic habitat.
3. Equipment will not be allowed to move up or down stream channels. Heavy equipment will cross streams only at designated or constructed crossings with culverts and bridges designed to allow upstream migration of fish.
4. Fire retardant will not be dropped within 100 yards of any wetland riparian area. Drops of retardant will be made parallel to and not across drainages.

### TERRESTRIAL HABITAT STIPULATIONS

1. Timber harvesting haul roads will be seasonally or permanently closed following timber harvesting if disturbance to big game becomes excessive.
2. Roadways, landings, and other heavily-disturbed sites will be reclaimed by establishing a ground cover.
3. Adequate snags for cavity-dwelling wildlife species will be left at forest edges, adjacent to aquatic and riparian areas, and near clearcut boundaries.
4. Buffers will be maintained around raptor nest sites.
5. In wooded areas, clearcuts will be restricted to 40 acres or less in size, limited in width to 400 yards, and irregular in shape to enhance edge effect. Adequate thermal and hiding cover for deer and elk will be retained in or adjacent to treatment areas.
6. Forty percent of an elk summer range will be maintained in a forested type with a 75 percent tree canopy.
7. Conifer and aspen harvesting will be prohibited in elk calving areas, and a buffer zone will be provided around these areas. Within the buffer zone, timber harvesting will be prohibited between May 1 and June 15.
8. Harvesting in aspen woodland will be prohibited from May 1 to July 15 unless on-site inspection reveals that fawning deer will not likely be disturbed.
9. Pinyon-juniper woodland harvesting occurring in crucial big game winter range will be restricted from January 16 to April 30 if determined to be detrimental to big game.



## APPENDIX 1

10. Powerlines will be constructed as described in *Suggested Practices for Raptor Protection or Powerlines — the State of the Art 1981*.
11. On reservoirs one-half surface acre or larger in size, fencing will be included to provide for development of aquatic and riparian habitat vegetation. Where fencing is included, water will be piped to drinking tanks or water gaps provided to facilitate livestock watering. When feasible, islands will be included as part of the reservoir development.
12. Spring boxes and waterlines with wildlife escape ramps will be installed at all spring developments to provide water for livestock drinking tanks. Seep areas will be fenced at the spring source, and overflow water will be piped to small fenced retention ponds, where feasible, to create riparian habitat.
13. Normally, allotment boundary and road right-of-way fences will be four-strand barbed wire with spacing 16, 6, 8, and 12 inches. Interior pasture fences will generally be three-strand barbed wire with spacing 16, 10, and 12 inches unless special circumstances required a tighter fence. Wire spacings will be from the ground up.
14. The *Recommended Guidelines for the Maintenance of Sage Grouse Habitat* promulgated by the Western Association of State Game and Fish Commissioners will be followed when planning and conducting sagebrush control projects within occupied sage grouse habitat. Major points in the guidelines include consultation with the Division of Wildlife, protection of breeding complexes (and nesting areas), winter concentration areas, and design of control areas.
15. Areas receiving moderate to high soil disturbance during treatment or an understory ground cover less than 10 percent will be seeded with a mixture of grass, forb, and browse species. Livestock grazing will be prohibited on all seeded areas for two growing seasons.
16. New roads or trails leading to or on treatment areas normally will be physically closed following completion of the project. Activities occurring during the winter or early spring will be completed in the shortest period and number of seasons possible in critical deer and elk winter range.
17. Roads will be constructed as outlined in BLM Manual 9143.



## APPENDIX 2 STANDARD STIPULATIONS FOR OIL AND GAS LEASING

### APPENDIX 2 STANDARD STIPULATIONS FOR OIL AND GAS LEASING







# **APPENDIX 2**

## **STANDARD STIPULATIONS FOR OIL AND GAS LEASING**

At the discretion of the authorized officer, the following stipulations may be added to any oil and gas leases. They also would be added to applications for permit to drill (APDs) on existing leases to the extent consistent with lease rights. The number and types of stipulations placed on leases or APDs would depend on the resources present in the area.

### **1. No Surface Occupancy Stipulation**

No occupancy or other activity will be allowed on the following portions of the lease: (legal description) to protect (identify sensitive resource).

This stipulation may be waived or reduced in scope if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified.

### **2. Scenic and Natural Values Stipulation**

In order to protect the outstanding scenic and natural landscape values of (identify the resource and area) located on the following portions of this lease (legal description), special design and reclamation measures may be required. Surface-disturbing activities may be denied in sensitive areas, such as unique geologic features and rock formations, visually prominent areas, and high recreation use areas. Special design and reclamation measures may include transplanting trees and shrubs, fertilization, mulching, special erosion control structures, irrigation, site recontouring to match the original contour, buried tanks and low profile equipment, and painting to minimize visual contrasts.

This stipulation may be waived or reduced in scope if circumstances change or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified.

### **3. Steep Slope Stipulation**

In order to prevent unacceptable impacts to soil, water, and vegetation resources, no surface-disturbing activities will be allowed on slopes greater than 40 percent. The following portions of this lease are affected (legal description).

This stipulation may be waived or reduced in scope if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified.

### **4. Elk Calving Area Stipulation**

In order to protect important seasonal wildlife habitat; exploration, drilling, and other development will be allowed only during the period from June 15 to May 15. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any particular year may be specifically approved in writing by the authorized officer. In addition, no surface-disturbing activity will be allowed in aspen stands in order to protect elk calving sites. Affected portions of this lease are: (legal description)

### **5. Known Cultural Resource Value Stipulation**

Important cultural resource values (identify resource values) are present on portions of this lease (legal description). Surface-disturbing activities must avoid known cultural sites unless mitigation of impacts is agreed to by the authorized officer. Where impacts cannot be mitigated to the satisfaction of the authorized officer, surface occupancy on that area must be prohibited.



## **APPENDIX 2**

### **6. Watershed Stipulation**

All lease operations will avoid interference with (identify municipal watershed) located on the following portions of this lease (legal description). This may include the relocation of proposed roads, drilling sites and other facilities, or application of appropriate mitigating measures.

This stipulation may be waived or reduced in scope if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified.

### **7. Perennial Streams Water Quality Stipulation**

In order to reduce impacts to water quality, surface-disturbing activities within 100 feet of perennial streams is limited to essential roads and utility crossings. The affected portions of this lease are: (legal description)

This stipulation may be waived or reduced in scope if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concerns(s) identified.

### **8. No surface Disturbance (NSD) Special Stipulation**

No surface-disturbing activities will be allowed in the (name of area, legal description).

### **9. Deer and Elk Winter Range Stipulation**

In order to protect important seasonal wildlife habitat, exploration, drilling, and other development will be allowed only during the period from May 1 to December 1. This limitation does not apply to maintenance and operation of producing wells. Exceptions to this limitation in any particular year may be specifically approved in writing by the authorized officer.

This stipulation may be waived or reduced in scope if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts on the concern(s) identified.

### **10. Threatened and Endangered Plant Habitat Stipulations**

The following portions of this lease are within the known habitat of the threatened, endangered, sensitive, and/or rare plant species (species name): (legal description).

Prior to any surface-disturbing activity, the lessee shall—

- a. Engage the services of a qualified botanist, approved by the authorized officer, to conduct a thorough and complete intensive inventory of the areas to be disturbed for evidence of such species habitat.
- b. Provide the authorized officer with sufficient time to review the documentary evidence that the inventory required above has been performed. This evidence shall be in the form of a report prepared on behalf of the lessee/operator, certified by the botanist, and submitted by the lessee to the authorized officer. The report shall cover, at a minimum, the location of the area inventoried, the inventory method, report of findings, and any conclusions/ recommendations for mitigating measures to be followed to reduce the impact of surface disturbance on such plant species.
- c. Follow any mitigating requirement set forth by the authorized officer concerning the protection or preservation of any such plant species. Such requirements may include the relocation of proposed roads, drilling site, or other facilities.

### **11. Threatened and Endangered Animal Habitat Stipulation**

The following portions of this lease are within the known habitat of the threatened, endangered, sensitive, and/or rare animal species (species name): (legal description).

Prior to any surface-disturbing activity, the lessee shall—

- a. Engage the services of a qualified biologist, approved by the authorized officer, to conduct a thorough and complete intensive inventory of the areas to be disturbed for evidence of such species habitat.
- b. Provide the authorized officer with sufficient time to review the documentary evidence that the inventory required above has been performed. This evidence shall be in the form of a report prepared on behalf of the lessee/operator, certified by the biologist, and submitted by the lessee to the authorized officer. The report shall cover, at a minimum, the location of the area inventoried, the inventory method, report of findings,



## STANDARD STIPULATIONS FOR OIL AND GAS LEASING

and any conclusions/recommendations for mitigating measures to be followed to reduce the impact of surface disturbance on such animal species.

c. Follow any mitigating requirements set forth by the authorized officer concerning the protection of preservation of any such species. Such requirements may include the relocation of proposed roads, drilling site, or other facilities.

### 12. Threatened and Endangered Seasonal Habitat Stipulation

In order to protect important seasonal habitat of the threatened or endangered animal species (species name), any lease operations which may affect these species will be allowed only during the period from (date) to (date) (varies by species) on the following portions of this lease (legal description). Exceptions to this limitation in any particular year may be specifically approved in any writing by the authorized officer.

### 13. Wilderness Protection Stipulation

Oil and gas activities on post-FLPMA leases will be subject to the following special wilderness protection stipulation.

By accepting this lease, the lessee acknowledges that the lands contained in this lease are being inventoried or evaluated for their wilderness potential by the Bureau of Land Management (BLM) under section 603 of the Federal Land Policy and Management Act of 1976, 90 Stat. 2743 (43 USC Sec. 1782), and that exploration or production activities which are not in conformity with section 603 may never be permitted. Expenditures in leases on which exploration drilling or production are not allowed will create no additional rights in the lease, and such leases will expire in accordance with law.

Activities will be permitted under the lease so long as BLM determines they will not impair wilderness suitability. This will be the case either until the BLM wilderness inventory process has resulted in a final wilderness inventory decision that an area lacks wilderness characteristics, or in the case of a wilderness study area until Congress has decided not to designate the lands included within this lease as wilderness. Activities will be considered nonimpairing if the BLM determines that they meet each of the following three criteria:

a. It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs (b) and (c) below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as

it can easily and immediately be terminated at that time, if necessary to management of the area as wilderness.

b. Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by the date. If the wilderness study is postponed, the reclamation deadline will be extended accordingly. If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within 4 years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory unit dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation with respect to the area's suitability or unsuitability for preservation as wilderness.

The reclamation will, to extent practicable, be done while the activity is in progress. Reclamation will include the complete recontouring of all cuts and tills to blend with the natural topography, the replacement of topsoil, and the restoration of plant cover at least to the point where natural succession is occurring. Plant cover will be restored by means of reseeding or replanting, using species previously occurring in the area. If necessary, irrigation will be required. The reclamation schedule will be based on conservative assumptions with regard to growing conditions, so as to ensure that the reclamation will be complete, and the impacts will be substantially unnoticeable in the area as a whole, by the time the Secretary is scheduled to send his recommendations to the President.

c. When the activity is terminated, and after any needed reclamation is complete, the area's wilderness values must not have been degraded so far, compared with the area's values for other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or unsuitability for preservation as wilderness. The wilderness values to be considered are those mentioned in section 2(c)



## APPENDIX 2

of the Wilderness Act, including naturalness, outstanding opportunities for solitude or for primitive and unconfined recreation, and ecological, geological, or other features of scientific, educational, scenic, or historical value. If all or any part of the area included within the leasehold estate is formally designated by Congress as wilderness, exploration and development operations taking place or to take place on that part of the lease will remain subject to the requirements of this stipulation, except as modified by the Act of Congress designating the land as wilderness. If congress does not specify in such act how existing leases like this one will be managed, then the provisions of the Wilderness Act of 1964 will apply, as implemented by rules and regulations promulgated by the Department of the Interior.



## GLOSSARY







# GLOSSARY

The following definitions and terms are commonly used in the BLM wilderness study process.

**ALLOTMENT.** An area designated and managed for grazing of livestock.

**ALLOWABLE HARVEST.** The amount of forest products that can be harvested annually or periodically from a specified area over a stated period in accordance with the objectives of sustained-yield management. The allowable harvest includes all planned timber and fuelwood harvest volumes exclusive of such products as Christmas trees, branches, and cones.

**AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).** Areas within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural or scenic values, fish and wilderness resources, or other natural systems or processes, or to protect life and safety from natural hazards.

**COMMERCIAL FOREST LAND.** Land producing trees that are typically utilized as sawtimber products and sold in units of board feet, and that is capable of yielding at least 20 cubic feet of wood per acre per year of commercial tree species.

**CRUCIAL WINTER RANGE.** That portion of the winter range to which a wildlife species is confined during periods of heaviest snow cover. Also referred to as sever winter range.

**CULTURAL RESOURCES.** Those fragile and nonrenewable remains of human activity, occupation, or endeavor reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred — even though evidence of the event no longer remains, and (3) the environment immediately surrounding the resource.

**CULTURAL RESOURCE INVENTORY.** A descriptive listing and documentation, including photographs and maps, of cultural resources; included are the processes of locating, identifying, and recording sites, structures, buildings, objects and districts through library and archival research, information from persons knowledgeable about cultural resources and varying levels of intensity of on-the-ground field surveys.

**CULTURAL RESOURCE SITE.** A physical location of past human activities or events. Cultural resource sites are extremely variable in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features. Prehistoric and historic sites that are recorded as cultural resources have sociocultural or scientific values and meet the general criterion of being more than 50 years old.

**ECOSYSTEM.** Collectively, all populations in a community, plus the associated environmental factors.

**EROSION CONDITION CLASS.** A classification system for ranking soil erosion in increments of 20 points: 0-20 = stable; 21-40 = slight; 41-60 = moderate; 61-80 = critical; and 81-100 = severe.

**FEDERAL LANDS.** Lands owned by the United States, without reference to how the lands were acquired or what federal agency administers the lands, including mineral estates or coal estates underlying private surface, but excluding lands held by the United States in trust for Indians, Aleuts, or Eskimos.

**FEDERAL LAND POLICY AND MANAGEMENT ACT (FLPMA).** The Federal Land Policy and Management Act of 1976 (Public Law 94-579, 90 Stat. 2743, 43 USC 1701).

**FORAGE.** All browse and herbaceous foods that are available to grazing animals.

**FOREST LAND.** All land that supports trees having a 10 percent or greater crown closure, now or potentially. This includes woodland, commercial forest land, and noncommercial forest land, provided the minimum crown closure standard is met.

**IMPACT.** The effect, influence, alteration, or imprint of an activity.

**IMPAIR.** To diminish in value or excellence.

**LEASE.** An instrument through which interests are transferred from one party to another, subject to certain obligations and considerations.

**MULTIPLE RESOURCE VALUES AND USES.** The present and potential uses of the various resources administered through multiple use management on the public lands and any public values associated with such uses.



## GLOSSARY

**MULTIPLE USE MANAGEMENT.** The management of public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.

**NATURALNESS.** Refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable" (from Section 2 (c), Wilderness Act).

**OFF-ROAD VEHICLE (ORV).** Any motorized vehicle capable or designed for travel on or immediately over land, water, or other natural terrain.

### OFF-ROAD VEHICLE DESIGNATIONS.

**OPEN.** Designated areas and trails where off-road vehicles may be operated (subject to operating regulations and vehicle standards set forth in BLM Manuals 8341 and 8343).

**LIMITED.** Designated areas and trails where the use of off-road vehicles is subject to restrictions such as limiting the number or types of vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are signed for use. Combinations of restrictions are possible such as limiting use to certain types of vehicles during certain times of the year.

**CLOSED.** Designated areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

**OUTSTANDING.** 1. Standing out among others of its kind; conspicuous; prominent. 2. Superior to others of its kind, distinguished, excellent.

**PHYSIOGRAPHIC REGION.** An extensive portion of the landscape normally encompassing many hundreds of square miles which portrays similar qualities of soil, rock, slope, and vegetation of the same geomorphic origin.

**PLANNING AREA.** The area for which resource management plans are prepared and maintained. In most instances, it is the same as the resource area, which is a geographic portion of a BLM district, under the supervision of an area manager.

**PLANNING CRITERIA.** The factors used to guide development of the resource management plan, or revision, to ensure that it is tailored to the issue previously identified and to ensure that unnecessary data collection and analyses are avoided. Planning criteria are developed to guide the collection and use of inventory data and information, the analysis of the management situation, the design and formulation of alternatives, the estimation of the effects of alternatives,

the evaluation of alternatives, and the selection of the Proposed Action.

**POPULATION CENTER.** See Standard Metropolitan Statistical Area.

**POST-FLPMA.** After October 21, 1976, the date of approval of the Federal Land Policy and Management Act.

**PRE-FLPMA.** Before October 21, 1976, the date of approval of the Federal Land Policy and Management Act.

**PRIMITIVE AND UNCONFINED RECREATION.** Nonmotorized and nondeveloped types of outdoor recreational activities.

**PRODUCTIVE FOREST LAND.** Forest land that is capable of yielding at least 20 cubic feet of wood per acre per year of any tree species.

**PROSPECTIVELY VALUABLE.** The term "prospectively valuable" has been used for approximately 50 years by the U. S. Geological Survey to identify lands that are being disposed of and which the federal government should retain the mineral rights to. In order to assure that the U. S. Government does not dispose of lands with a mineral potential and to protect the assets of the public, the test of value is necessarily very low. In the case of oil and gas, all that is required to be "prospectively valuable" is that the area be underlaid by 1,000 feet of sedimentary rocks. No determination will have been made if there is a source rock, reservoir rock, or trapping mechanisms within the area.

**PUBLIC LAND.** Vacant, unappropriated, and unreserved lands which have never left federal ownership; also, lands in federal ownership which were obtained by the government in exchange for public lands or for timber on public lands. Land administered by the Bureau of Land Management.

**RECREATION DAY.** The presence of one person on an area of land or water for the purpose of engaging in a recreational activity during all or part of a calendar day.

**RECREATION MANAGEMENT AREA.** Area of public land that is the basic land unit for recreation management.

**RECREATION OPPORTUNITY SPECTRUM (ROS).** A continuum used to characterize recreation opportunities in terms of setting, activity, and experience opportunities.

**REGION.** A homogenous geographical area generally larger than the planning area under study, whose boundaries are determined through the EIS scoping process and the identification of issues. Its boundaries



## GLOSSARY

- should encompass (1) all lands that would be affected by the land use allocations proposed before the planning area, and (2) all lands which have an effect on the activities occurring in the planning area.
- RESOURCE MANAGEMENT PLAN (RMP).** The Bureau's basic land use plan after 1979.
- ROAD.** Vehicle routes that have been improved and maintained by mechanical means to ensure relatively regular and continuous use.
- SCENIC QUALITY.** The inherent scenic values of the landscape; the overall impression retained after driving or walking through and area.
- SPECIES, ENDANGERED.** An animal or plant whose prospects of survival and reproduction are in immediate jeopardy; "endangered species" is further defined by the Endangered Species Act of 1973, as amended.
- SPECIES, SENSITIVE.** A designation which is (1) applied to species not yet officially listed but which are undergoing status review or are proposed for listing according to FEDERAL REGISTER notices published by the Secretary of the Interior, or the Secretary of Commerce, or in accordance with comparable state documents published by state officials; (2) applied to species whose populations are consistently small and widely dispersed or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction, or (3) applied to species whose numbers are declining so rapidly that official listing may become necessary as a conservation measure.
- SPECIES, THREATENED.** Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range; "threatened species" is further defined by the Endangered Species Act of 1973, as amended.
- SOIL ASSOCIATION.** A mapping unit used on general soil maps, in which two or more defined taxonomic units occurring together in a characteristic pattern are combined.
- SOLITUDE.** 1. The state of being alone or remote from habitations; isolation. 2. A lonely, unfrequented, or secluded place.
- STANDARD METROPOLITAN STATISTICAL AREA.** A county with at least one city of 50,000 or more inhabitants plus as many adjacent counties metropolitan in character which are socially integrated with that central city or cities.
- STEPPE-TYPE VEGETATION.** Vegetation found on arid lands that usually have extreme temperature ranges and loess (wind-deposited) soils.
- SUITABILITY.** As used in the Wilderness Act and in the Federal Land Policy and Management Act, refers to a recommendation by the Secretary of the Interior or the Secretary of Agriculture that certain federal lands satisfy the definition of wilderness in the Wilderness Act and have been found appropriate for designation as wilderness on the basis of an analysis of the existing and potential uses of the land.
- SUBSTANTIALLY UNNOTICEABLE.** Refers to something that either is so insignificant as to be only a very minor feature of the overall area or is not distinctly recognizable by the average visitor as being man-made or man-caused because of age, weathering, or biological change. An example of the first would be a few minor dams or abandoned mine buildings that are widely scattered over a large area, so that they are an inconspicuous part of the scene. Serious intrusions of this kind, or many of them, may preclude inclusion of the land in a wilderness study area. An example of the second would be an old juniper control project that has grown up to a natural appearance, the old fallen trees largely decomposed.
- SURFACE FACILITIES.** All structures such as drill pads, buildings, well heads, and so forth, commonly used in the production of oil and gas.
- VISITOR DAY.** The presence of one or more persons on an area of land or water for the purpose of engaging in one or more recreational activities for a period of time aggregating 12 hours.
- VISUAL RESOURCE.** Land, water, vegetation, animal and other visible features.
- VISUAL RESOURCE MANAGEMENT (VRM).** The planning, designing, and implementation of management objectives to provide acceptable levels of visual impacts for all BLM resource management activities.
- VISUAL RESOURCE MANAGEMENT CLASSES.** The degree of acceptable visual change within a characteristic landscape. A class is based upon the physical and sociological characteristics of any given homogeneous area and serves as a management objective.
- CLASS I areas (preservation)** provide for natural ecological changes only. This class includes primitive areas, some natural areas, some wild and scenic rivers, and other similar sites where landscape modification activities should be restricted.
- CLASS II (retention of the landscape character)** includes areas where changes in any of the basic elements (form, line, color, or texture) caused by management activity should not be evident in the characteristic landscape.



## GLOSSARY

**CLASS III** (partial retention of the landscape character) includes areas where changes in the basic elements (form, line, color, or texture) caused by a management activity may be evident in the characteristic landscape. However, the changes should remain subordinate to the visual strength of the existing character.

**CLASS IV** (modification of the landscape character) includes areas where changes may subordinate the original composition and character; however, they should reflect what could be a natural occurrence within the characteristic landscape.

**URBAN.** Extensively developed residential or industrial areas where VRM objectives are not assigned.

**VISUAL SENSITIVITY.** Degree of concern expressed by the user toward scenic quality and existing or proposed visual change in a particular characteristic landscape.

**WILDERNESS.** An area formally designated by Act of Congress as part of the National Wilderness Preservation System.

**WILDERNESS CHARACTERISTICS.** Identified by Congress in Section 2 (c) of the 1964 Wilderness Act (78 Stat. 891): Namely, size, naturalness, outstanding opportunities for solitude or a primitive and unconfined type of recreation, and supplemental values such as geological, archaeological, historical, ecological, scenic, or other features. It is required that the area possess at least 5,000 acres or more of contiguous public land or be of a size to make practical its preservation and use in an unimpaired condition, be substantially natural or generally appear to have been affected primarily for the forces of nature, with the imprint of man being substantially unnoticeable, and have either outstanding opportunities for solitude or a primitive and unconfined type of recreation. Congress stated that a wilderness may also have supplemental values, which include ecological, geological, or other features of scientific, educational, scenic, or historical values.

**WILDERNESS INVENTORY.** An evaluation of the public lands in the form of a written description and map showing those lands that meet the wilderness criteria as established under Section 603 (a) of FLPMA and Section 2 (c) of the Wilderness Act, which will be referred to as wilderness study areas (WSAs).

**WILDERNESS MANAGEMENT.** The management of human use and influence on lands which have been designated by Act of Congress as wilderness areas.

**WILDERNESS MANAGEMENT POLICY.** A policy document presenting the general objectives, policies, and specific activity guidance applicable to all designated BLM wildernesses. Specific management objectives, requirements, and decisions implementing administrative practices and visitor activities in

individual wildernesses are developed and described in the wilderness management plan for each unit.

**WILDERNESS SUITABILITY RECOMMENDATION.** A recommendation by the Bureau of Land Management, the Secretary of the Interior or the President, as to an area's suitability or nonsuitability for preservation as wilderness.

**WILDERNESS REPORTING.** The process of preparing the reports containing wilderness recommendations on wilderness study areas and transmitting those reports to the Secretary of the Interior, the President, and Congress.

**WILDERNESS REVIEW.** The term used to cover the entire wilderness inventory, study, and reporting process of the wilderness program of the Bureau of Land Management.

**WILDERNESS STUDY AREA (WSA).** A roadless area determined to have wilderness characteristics as described in Section 603 of FLPMA and Section 2 (c) of the Wilderness Act of 1964 (78 Stat. 891).

**WILDERNESS STUDY POLICY.** The process outlined in these guidelines which specifies how each WSA must be studied through the BLM resource management planning system, analyzing all resources, values, and uses within the WSA to determine whether the area will be recommended as suitable or unsuitable for wilderness.

**WOODLAND.** Land producing pinyon and juniper trees that are typically utilized as nonsawtimber products and sold in units other than board feet. Woodland is forest land that is not included in the commercial forest land allowable cut base. Woodland can include both commercial and noncommercial forest land.

## ACRONYMS

Following are the acronyms used in this final wilderness environmental impact statement.

ACEC: Area of Critical Environmental Concern

AMP: Allotment Management Plan

AUM: Animal Unit Month

BLM: Bureau of Land Management

CEQ: Council on Environmental Quality

CDOW: Colorado Division of Wildlife

EIS: Environmental Impact Statement

HMP: Habitat Management Plan



## GLOSSARY

IMP: Interim Management Policy and Guidelines for Lands  
under Wilderness Review

NWPS: National Wilderness Preservation System

ORV: Off-Road Vehicle

PNV: Potential Natural Vegetation

PWSR: Preliminary Wilderness Study Report

RMP: Resource Management Plan

ROS: Recreation Opportunity Spectrum

SMSA: Standard Metropolitan Statistical Area

USBM: U. S. Bureau of Mines

USDA: U. S. Department of Agriculture

USDI: U. S. Department of the Interior

USFS: U. S. Forest Service

USGS: U. S. Geological Survey

VRM: Visual Resource Management

WSA: Wilderness Study Area

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